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**RELATIONS AMONG MEDITATION EXPERIENCE, MINDFULNESS,
DIFFERENTIATION OF SELF, AND COUNTERTRANSFERENCE MANAGEMENT**

A Dissertation in

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by

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ABSTRACT

Given that research supports that therapists' individual differences can facilitate positive client outcome or impede therapy, better understanding what mechanisms can contribute to countertransference management qualities can help further therapists' training and development, and subsequently lead to more successful treatment. The present research is the first study to examine the relationship among mindfulness meditation experience, mindfulness, differentiation of self, and countertransference management qualities. Previous research on mindfulness, differentiation of self, and countertransference management provides evidence that these separate constructs share similar correlates, suggesting that these three constructs correlate with each other. Seventy-eight dyads comprised of therapist trainees and their supervisors completed self-report measures to assess trainees' mindfulness meditation experience, mindfulness, self-differentiation, countertransference management qualities, controlling for social desirability. Results indicate that mindfulness itself is a function of meditation experience and that mindfulness is related to therapists' self-reported self-differentiation. Results support that countertransference management qualities are a function of mindfulness, but only in terms of a therapists' non-reactivity. When examined holistically, countertransference management qualities were predicted by the linear combination of mindfulness, self-differentiation, and meditation experience. Among these three predictor variables, only meditation experience was found to be a significant predictor. Therapists' mindfulness meditation experience predicted the degree therapists possessed the qualities that have been theorized and empirically supported to positively relate to countertransference management qualities. This is the first study to propose such a model to predict countertransference management. Implications for theory, practice,

research, training, and supervision are discussed. Study strengths and limitations are also addressed.

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Chapter I

Introduction

Therapists' characteristics and the therapeutic relationship have been identified as playing crucial roles in impacting psychotherapy success. Therapists' factors account for more variance in treatment outcome than techniques that serve as the foundation for manualized treatments (Wampold, 2001). Research suggests that therapists' ability to appropriately manage countertransference contributes to the efficacy of the therapeutic relationship (Gelso & Hayes, 2002). Empirically bridging the gap between therapists' characteristics and therapeutic relationship factors like countertransference management could potentially contribute to the research on empirically supported relationships between therapists and clients (Norcross, 2002; Norcross, Levant, & Beutler, 2006). Empirically supported relationships have been proposed as a vital research focus (Norcross, 2002; Norcross, Levant, & Beutler, 2006) given the push towards evidence-based practices (APA, 2005) in the field of counseling psychology. As such, it is important to better understand what may facilitate countertransference management.

Countertransference, in this paper, refers to "counselor reactions that originate from areas of unresolved conflict in the counselor" (Rosenberger & Hayes, 2002a, p. 265).

Countertransference is considered to be part of all therapeutic relationships regardless of theoretical orientation (Gelso & Carter, 1994). Research shows that countertransference can behaviorally manifest as a blend of avoidance and approach responses to clients (Gelso & Hayes, 2007; Hayes, McCracken, McClanahan, Hill, Harp & Carozzoni, 1998; Rosenberger & Hayes, 2002b). Gelso, Latts, Gomez, and Fassinger (2002) found that therapists in training who had more of the characteristics that contribute to countertransference management as rated by their supervisors had better treatment outcomes as rated by their supervisors and clients.

However, what happens if countertransference is not dealt with appropriately? Research on countertransference management has shown that unmanaged countertransference can impede therapy in a number of ways (Gelso & Hayes, 2001; Gelso & Hayes, 2007; Harris, 1999; Hayes & Gelso, 1993; Hayes et al., 1998; Hayes, Riker, & Ingram, 1997; Lambert et al., 1977; Ligiero & Gelso, 2002; Pope & Tabachnick, 1993; Rosenberger & Hayes, 2002a; Van Wagoner et al., 1991). For instance, when therapists show negative countertransference behavior, the working alliance can become weaker (Gelso & Hayes, 2001). Unmanaged countertransference can lead to therapists avoiding clients' content, overly involving themselves with clients' issues, and remembering clients' content in therapy sessions differently than how it was actually discussed in session (Gelso & Hayes, 2007). Furthermore, possible behavioral manifestations of countertransference can include therapists ignoring, blaming, or rejecting clients (Gelso & Hayes, 2007).

Sixty years of research has found that therapists who engage in positive behaviors such as expressing warmth, understanding and empathy and engage in less negative behavior such as ignoring, blaming, or rejecting contribute to successful treatment (Lambert & Barley, 2002), which suggests that appropriately managing countertransference may affect therapy outcome. Hayes et al.'s (1997) study of 20 brief therapy cases found that in cases with moderate to poor outcome, countertransference behavior was strongly and inversely related to outcome. Thus, managing countertransference is a crucial component of the therapy process (Gelso & Hayes, 2007) and can contribute to a successful therapeutic relationship (Gelso & Hayes, 2001).

Research has found that counselor trainees struggle with learning to manage their intense reactions to clients (Hill, Sullivan, Knox & Schlosser, 2007; Williams, Judge Hill, & Hoffman, 1997). Due to their inexperience, counselor trainees, in particular, may be more vulnerable to act

out towards their clients based on their countertransference responses depending on their level of self-awareness and self-insight (Howard, Inman, & Altman, 2006). Hill et al. asked counselor trainees during their first doctoral semester to journal about their process of becoming a psychotherapist, any feelings of anxiety they experienced, and their countertransference experiences among other topics. Hill et al. found that counselor trainees reported that their troubling reactions to clients were a challenge related to becoming a psychotherapist. In addition, counselor trainees reported feeling anxious about seeing clients including having a concern about not knowing what to do in session with clients (Hill et al., 2007). Trainees also reported struggling with how to empathize with clients and problems with their self-awareness in sessions. For example, counselor trainees reported problems with being fully present in session with clients, with being aware of their own feelings and reactions, with getting into negative thinking and with being distracted by hindering self-awareness and self-consciousness (Hill et al., 2007). Counselor trainees' reactions to clients included feeling under- and over-identified with their clients and feeling frustration when clients did not conform to trainees' expectations of how clients should behave in sessions (Hill et al., 2007). Thus, research suggests that counselor trainees encounter problems with their reactions to clients (Hill et al., 2007) and may lack competencies in skills that contribute to countertransference management such as anxiety management, self-awareness, insight, and empathy.

Van Wagoner, Gelso, Hayes, and Diemer (1991) found empirical support that therapists' self-insight, self-integration, empathy, anxiety management, and conceptualizing ability are qualities that facilitate countertransference management. Therapist self-insight is the degree to which a therapist has an awareness of his/her own feelings and the origin of those feelings. Self-integration refers to the therapist's capacity to differentiate him/herself from others including the

ability to prioritize the client's needs over his/her own needs. Self-integration also refers to the therapist's possession of a stable, coherent identity and psychological health. Empathy refers to the extent the therapist possesses both a conceptual understanding of another person's experience and the ability to temporarily engage in another person's feelings as though the therapist was in another person's shoes. Anxiety management refers to the degree to which the therapist experiences anxiety as a state in counseling and experiences general anxiety as a trait. Conceptualizing ability is the degree to which the therapist has the capacity to conceptualize the dynamics between the therapist and client in the therapeutic relationship and given the client's past. Based on their empirical findings, Van Wagoner et al. suggest that therapists in training need means to develop these five qualities in order to manage countertransference when working with clients.

Mindfulness is now one of the most researched topics in psychotherapy (Germer, Siegel, & Fulton, 2005). The word *mindfulness* originally comes from the Pali word *sati* which means having awareness, attention, and remembering (Bodhi, 2000; Germer et al., 2005). Mindfulness can simply be defined as "moment-by-moment awareness" (Germer et al., 2005, p. 6). In the present study, mindfulness is viewed as a multidimensional construct with five measurable facets: 1) observing and noticing sensations, 2) describing one's internal experience with words, 3) acting with awareness and concentration, 4) being non-reactive toward one's inner experience, and 5) being non-judging of experience (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

Germer et al. (2005) propose that regardless of theoretical orientation, mindfulness practice offers therapists a way to affect aspects of therapy that account for successful treatment. Mindfulness is systematically cultivated in mindfulness meditation practice by applying one's attention to one's body sensations, feelings, mental states (i.e., thoughts), and surrounding

environment (Bodhi, 2000; Germer, 2005; Germer et al., 2005; Gunaratana, 1990; Wallace, 2001; Young, 1997). Mindfulness meditation and therapists' mindfulness seem to benefit certain critical aspects of the therapy process. Theory has suggested that mindfulness meditation can facilitate therapists' awareness of their countertransference (Chalif, 2001; Epstein, 1995, 2004; Fauth, Gates, Vinca, Boles, & Hayes, 2007; Fulton, 2005; Hick & Bien, 2008).

Neuroscience research provides support that mindfulness facilitated by mindfulness mediation practice elicits qualities that would lend themselves to countertransference management. Mindfulness has been shown to enhance middle prefrontal lobe functions such as bodily regulation, attuned communication, emotional balance, response flexibility, empathy, insight or self-knowing awareness, morality, intuition, and fear modulation (Siegel, 2007). Countertransference management has not yet been extensively studied in relation to mindfulness though a synthesis of research suggests therapists' mindfulness would lend itself to countertransference management.

Countertransference management and mindfulness both theoretically overlap with the relational construct of differentiation of self from Bowen family therapy. According to Bowen theory (1978), differentiation of self refers to the extent to which one can balance intimacy and autonomy in relationships and continue to maintain healthy emotionally and intellectually functioning. A person who is highly differentiated has an ability to separate oneself from his/her thoughts and feelings, uses more "I" statements, and has less cut-off, emotional reactivity, and fusion in personal relationship (Skowron & Friedlander, 1998).

Research on differentiation of self has drastically increased in the past 10 years. No research to date exists on the relationship among differentiation of self, mindfulness, and countertransference management. However, research on these three separate constructs provides

evidence that they share similar correlates, suggesting that these three constructs possibly correlate with each other.

Differentiation of self theoretically aligns with mindfulness in that people who have the ability to differentiate themselves from their thoughts and feelings, and are not emotionally reactive, cut-off, or fused in their personal relationships hypothetically would be mindful. Namely, they would likely have the ability to describe their experience with words, be non-reactive toward their inner experience, act with awareness, observe their thoughts and feelings, and have a non-judgmental attitude towards their experience.

In addition, differentiation of self theoretically aligns with the five therapists' factors of countertransference management. In a qualitative study assessing origins, triggers and manifestations of countertransference, Hayes et al. (1998) empirically found that common sources of unresolved issues for therapists include therapists' family of origin issues. It can be inferred from this empirical research that if therapists cannot differentiate their family of origin issues from their sense of identity and from clients' issues, they will have difficulty effectively managing countertransference. Thus, it is plausible that therapists who have higher differentiation of self scores would be more capable of managing countertransference.

The purpose of the present study is to examine the relationship among meditation experience, mindfulness, differentiation of self, and countertransference management. Based on current neuroscience research, it can be inferred that the more therapists practice mindfulness meditation, the more mindfulness they possess. As such, it is hypothesized that therapists' mindfulness meditation practice positively correlates with therapists' mindfulness. Based on the theoretical overlap between the mindfulness and countertransference management constructs, it is hypothesized that therapists' mindfulness positively correlates with countertransference

management. In addition, it is hypothesized that therapists' mindfulness positively correlates with therapists' differentiation of self. It is also hypothesized that differentiation of self positively correlates to therapists' ability to manage countertransference. It is also hypothesized that therapists' mindfulness and differentiation of self both predict therapists' ability to manage countertransference. Lastly, it is hypothesized that meditation practice experience, mindfulness, and differentiation of self when combined account for a significant amount of the variance of countertransference management. Given that therapists' individual differences can facilitate positive client outcome or impede therapy, better understanding what mechanisms can contribute to countertransference management can help further therapists' training and development, and subsequently lead to more successful treatment.

Chapter II

Literature Review

The purpose of the present study is to examine the relationships among meditation experience, mindfulness, differentiation of self, and countertransference management. This chapter is divided into three sections to review relevant literature regarding countertransference, mindfulness, and differentiation of self. Countertransference management will be discussed in depth in the countertransference section. Meditation experience will be discussed in the section on mindfulness.

Countertransference

Research shows that unmanaged countertransference is detrimental to therapy (Gelso & Hayes, 2001; Gelso & Hayes, 2007; Harris, 1999; Hayes & Gelso, 1993; Hayes et al., 1998; Hayes, Riker, & Ingram, 1997; Lambert, Bergin, & Collins, 1977; Ligiero & Gelso, 2002; Pope & Tabachnick, 1993; Rosenberger & Hayes, 2002a; Van Wagoner, Gelso, Hayes, & Diemer, 1991). When therapists exhibit countertransference behavior, the working alliance tends to be weaker (Gelso & Hayes, 2001; Gelso & Mohr, 2001; Ligiero & Gelso, 2002). Therapists' under involvement with clients due to countertransference can contribute to therapy ending prematurely (Hill, Nutt-Williams, Heaton, Thompson, & Rhodes, 1996).

Research indicates that the majority of, if not all, psychotherapists experience countertransference reactions (Harris, 1999; Hayes et al., 1998; Pope & Tabachnick, 1993). Hayes et al. found that among eight experienced therapists who ranged in theoretical orientation and who were considered experts by their peers, the therapists identified that countertransference occurred in 80% of the therapists' 127 therapy sessions.

Given that countertransference is so prevalent among therapists and that unmanaged countertransference can have negative effects on therapy outcome, it is crucial that countertransference is appropriately managed in order to prevent its potential negative effects (Gelso & Hayes, 2007). In examining countertransference management, it is relevant to first explore how countertransference is defined. Thus, the next section will focus on definitions of countertransference. Research on the structure of countertransference then will be reviewed including the origins, triggers, and emotional, cognitive, and behavioral manifestations of countertransference. Effects of unmanaged countertransference and factors that contribute to the management of countertransference will then further be reviewed.

Conceptualizations and Definitions of Countertransference

There are three main approaches that have been used in defining the scope of countertransference: classical, totalistic, and moderate (Rosenberger & Hayes, 2002b). These three definitions of countertransference will be explained (see Rosenberger & Hayes, 2002b, for extensive review). While complementary and relational views of countertransference have been theorized (see Gelso & Hayes, 2007), these approaches to countertransference will not be discussed since little to no research uses these definitions.

Classical Conceptualization.

In the classic view, countertransference was defined as therapists' emotional reactions to clients' transference that stemmed from therapists' unresolved issues and intrapsychic conflicts (Freud, 1910; Gelso & Hayes, 2007; Orr, 1988; Racker, 1988; Rosenberger & Hayes, 2002b). The classic view considered countertransference as a problem within the analyst and was not attributed to the client (Freud, 1910, 1959). Given Freud's emphasis on the need for the analyst to be emotionally neutral, countertransference was viewed as being inappropriate and a

phenomenon that the analyst needed to overcome (Freud, 1910; Gelso & Hayes, 2007; Orr, 1988; Racker, 1988; Rosenberger & Hayes, 2002b).

Freud introduced the term countertransference by saying:

“...We have begun to consider the ‘counter-transference,’ which arises in the physician as a result of the patient’s influence on his unconscious feelings, and have nearly come to the point of requiring the physician to recognize and overcome this countertransference in himself...Anyone who cannot succeed in this self-analysis may without more ado regard himself as unable to treat neurotics by analysis” (Freud, 1910/1959, p. 289).

The classical view has been criticized for being too narrowly defined and not accounting for therapists’ emotional reactions that are not based on unresolved issues (Gelso & Hayes, 1998, 2002). Furthermore, the classical conceptualization has been criticized for not addressing what benefits may come from countertransference (Gelso & Hayes, 2007). These limitations led to the development of the totalistic definition of countertransference.

Totalistic Conceptualization.

In the totalistic view, countertransference includes therapists’ feelings, thoughts, and behaviors (Gelso & Hayes, 2007; Gorkin, 1987; Klein, 1946, 1993; Orr, 1988; Racker, 1988; Rosenberger & Hayes, 2002b). Essentially everything therapists experience or do, either consciously or unconsciously is considered to be a countertransference response (Gelso & Hayes, 2007; Gorkin, 1987; Kiesler, 2001; Klein, 1946, 1993; Orr, 1988; Racker, 1988; Rosenberger & Hayes, 2002b). The totalistic view considers countertransference to be a beneficial resource to better understand the patient (Gelso & Hayes, 2007). In this view, therapists’ internal reactions serve as a window into how other people in the patient’s life

respond to the patient and enable the therapist to better understand what the patient may be pulling for from others (Gelso & Hayes, 2007). Therapists' feelings and responses to the patient can also expose parts of the patient's internal experience that may not otherwise be noticeable (Gelso & Hayes, 2007).

While the totalistic view of countertransference has been recognized as valuing therapists' emotional reactions to the patient, it has been criticized for being too broadly defined (Gelso & Hayes, 2007). Gelso and Hayes (1998, 2007) emphasize that if countertransference encompasses all therapist reactions, then there is no need for the term "countertransference". However, within all therapists' reactions, there are some responses to the client that are normal and likely expected responses that are shared by others in the client's life (Gelso & Hayes, 2007). These reactions differ from reactions that stem from therapists' unresolved issues (Gelso & Hayes, 2007). Thus, there is a need to distinguish reactions based on therapists' unresolved issues from therapists' reactions that have other causes (Gelso & Hayes, 1998, 2007).

Moderate Countertransference Definition.

The definition of countertransference in this paper aligns with the moderate trans-theoretical approach to countertransference predominantly used in research: countertransference is "counselor reactions that originate from areas of unresolved conflict in the counselor" (Rosenberger & Hayes, 2002b, p. 265). The moderate view of countertransference differs from classical and totalistic definitions in significant ways. The moderate view is broader than the classical definition in that it views countertransference as not solely negative (Rosenberger & Hayes, 2002b). In addition, the moderate view differs from the classical view in that it is not restricted to the therapists' reaction to clients' transference, but the therapists' internal and external reactions due to therapists' unresolved conflicts (Rosenberger & Hayes, 2002b).

Conversely, the moderate view of countertransference has a smaller scope than the totalistic definition in that it differentiates all therapists' responses to the client from those responses to the client that stem from therapists' unresolved conflicts and vulnerabilities (Rosenberger & Hayes, 2002b).

There are thought to be two types of countertransference: acute or chronic countertransference (Reich, 1951). Reich theorized that acute countertransference happens "under specific circumstances with specific patients" (p.26). Rosenberger and Hayes (2002a) suggest that acute countertransference can be considered state-like in that it is infrequently elicited within the therapist.

Chronic countertransference is thought to be trait-like in that therapists frequently enact these type of countertransference responses to a variety of clients (Gelso & Hayes, 2007; Rosenberger & Hayes, 2002a). Research supports the existence of chronic or habitual countertransference among therapists (Holmgvist, 2001; Holmgvist, Hansjons-Gustafsson, & Gustafsson, 2002) and among psychiatric staff (Holmgvist & Armelius, 2006). Holmgvist (2001) found that therapists' style of countertransference responses is stable and consistent over time.

It is important to note that the moderate definition of countertransference used in this paper does not include all or any reaction to clients, but rather only those reactions that stem from therapists' unresolved conflicts or vulnerabilities (Gelso & Hayes, 2007). Emotional reactions to clients that do not stem from therapists' unresolved conflicts or vulnerabilities encompass what Gelso and Hayes (2007) call the therapist's subjectivity. Whereas therapists' subjective experiences are a vital part of therapy, they are not the same thing as countertransference (Gelso & Hayes, 2007).

Countertransference along with other aspects of the therapeutic relationship like the working alliance and transference are co-created by client and therapist (Gelso & Hayes, 2007). As such, Gelso and Hayes (2007) propose viewing countertransference as structurally composed of: 1) vulnerabilities or unresolved issues within the therapist, 2) triggers, 3) manifestations, 4) effects, and 5) management (Gelso & Hayes, 2007; Rosenberger & Hayes, 2002a). Thus, research on these components of countertransference will be reviewed.

Origins of Countertransference

Origins of countertransference include unresolved issues or vulnerabilities within therapists (Gelso & Hayes, 2007; Hayes et al., 1998; Rosenberger & Hayes, 2002a). Hayes et al. found that among 8 experienced therapists, countertransference originated from family issues, therapists' needs, specific issues related to therapy, and cultural issues. The bulk of countertransference in therapists stemmed from therapists' family issues including family of origin issues, and issues related to parenting and being a romantic partner. Therapists' needs, such as need for control, need to help, and general narcissism were sources of countertransference and led to therapists putting their own needs ahead of clients' needs. Issues related to therapy such as termination and therapists' performance issues were also reported sources of countertransference. Lastly, therapists' issues with clients' gender and race also precipitated cultural countertransference and culturally-reinforced countertransference.

In assessing the origins of countertransference, Gelso and Hayes (2007) suggest that countertransference is multi-layered and may be outside of therapists' awareness. The notion that the origins of countertransference are multi-layered by nature and subsequently difficult to research is evident in the research methods used to study countertransference. Two studies have approached countertransference by trying to discover therapists' triggers of countertransference

(Cutler, 1958; Rosenberger & Hayes, 2002a). Other methodologies include directly interviewing therapists about their countertransference (Hayes et al., 1998). Beyond origins of unresolved issues for therapists, it is relevant to consider potential triggers of countertransference.

Triggers

Triggers are considered to be events in therapy or characteristics of clients that activate therapists' vulnerabilities or unresolved conflicts (Gelso & Hayes, 2007; Hayes et al., 1998; Rosenberger & Hayes, 2002a). In terms of how countertransference occurs, Gelso and Hayes (2007) propose what they call their *countertransference interaction hypothesis* in that client characteristics or the content of clients' material interacts with therapists' unresolved issues to create countertransference. Thus, it is relevant to examine research on the content of clients' clinical work and clients' characteristics that trigger countertransference responses.

Hayes et al. (1998) found that among eight experienced therapists, triggers could be grouped into several categories. Client content including parenting and romantic partner issues, death, and family of origin issues elicited countertransference responses in therapists. Emotions expressed by clients including anger toward the therapist also provoked countertransference reactions in therapists. In addition, other triggers for therapists included therapists' perceptions of how therapy was progressing, therapists comparing clients to other people, and a change in therapy structure (e.g., rescheduled therapy appointments). In sum, this qualitative study suggests that several aspects of therapy and client content can arouse countertransference in therapists.

This is consistent with pioneering countertransference research that found that clients' therapy content triggered countertransference responses (Cutler, 1958). In this classic study, therapists' self-ratings were compared with judges' ratings on therapists' and clients' behavior in session. Cutler found that therapists tended to overestimate how often clients would discuss

material when it was similar to therapists' unresolved issues (Cutler, 1958; Gelso & Hayes, 2007). This finding is consistent with more recent considerations of cultural countertransference and culturally-reinforced countertransference in which clients' race, ethnicity, sexual orientation (Gelso & Mohr, 2001) or religious values (Genia, 2000; Lannert, 1991) may trigger countertransference responses in therapists.

Research has shown that countertransference is elicited in therapists when anger is expressed directly towards therapists (Hill et al., 2003) and when therapists have unresolved issues regarding anger (Bandura, Lipsher, & Miller, 1960; Harris, 1999; Pope & Tabachnick, 1993; Sharkin, 1989; Sharkin & Gelso, 1993). Thus, Gelso and Hayes' (2007) interactional hypothesis of countertransference can be applied as follows: when countertransference is elicited, situations within therapy (e.g., anger towards therapists) can interact with therapists' unresolved issues (e.g., issues with anger), and trigger countertransference responses.

Research supports that client factors alone do not predict countertransference responses (Hayes & Gelso, 1991; Yulis & Kiesler, 1968). Gelso and Hayes (2007) note that research on clients' presentation styles such as seductiveness, hostility and dependency and research on clients' issues such as sexual assault, HIV status, and same-sex relationship issues have not contributed clear findings (Gelso, Fassinger, Gomez, & Latts, 1995; Hayes & Gelso, 1991; Hayes & Gelso, 1993; Yulis & Kiesler, 1968). Looking at these factors in isolation without considering therapists' unresolved issues has led to a general lack of support for hypotheses predicting that client variables alone will predict CT reactions (Gelso & Hayes, 2007). However, research (Fauth & Hayes, 2006; Gelso et al., 1995; Hayes & Gelso, 1993) demonstrates support for the countertransference interaction hypothesis.

This is also consistent with a social relations approach in which countertransference responses are viewed as a result of the perceiver (therapist), a target (client), the therapeutic relationship (therapists' unresolved issues) and error (Marcus & Buffington-Vollum, 2005). In the social relations model of countertransference, perceptions which can be influenced by therapists' unresolved issues contribute to countertransference being elicited. While there is little research on the social relations model of countertransference, theoretically the social relations model is consistent with the countertransference interaction hypothesis in that there are multiple ingredients (therapists' unresolved issues interacting with situations with clients) that contribute to countertransference being provoked. In addition to origins and triggers of countertransference, manifestations of countertransference are relevant to examine to better understand how to manage countertransference.

Manifestations

In considering internal and external manifestations of countertransference, countertransference feelings and thoughts are distinguished from countertransference behavior (Gelso & Hayes, 2007; Hayes & Gelso, 1991; Kholooci, 2007). Countertransference feelings and thoughts are therapists' inevitable internal reactions to clients which can be clinically beneficial (Gelso & Hayes, 2007). However, countertransference behavior, the acting on the internal countertransference feelings and thoughts, is considered harmful to clients and can negatively affect the therapeutic relationship (Gelso & Hayes, 2001; Gelso & Hayes, 2007). This section will review research on both internal countertransference reactions and on countertransference behavior.

Emotional and Cognitive Manifestations

Research has shown that anxiety is one of the most common emotional countertransference responses (Fauth & Hayes, 2006; Gelso et al., 1995; Hayes & Gelso, 1991; Hayes & Gelso, 1993; Hayes et al., 1998; Latts & Gelso, 1995; Yulis & Kiesler, 1968). Thus, anxiety management is a central component to countertransference management. In addition to anxiety, Hayes et al. (1998) found that countertransference responses can include a variety of affective responses including “identification with client...compassionate understanding..negative feelings..nurtance...” (p.476) as well as “boredom, uncertainty, inadequacy, disappointment with the client” (p. 479). In addition, emotional avoidance reactions included therapists’ fatigue and being disappointed with the client (Hayes et al., 1998). Cognitive avoidance reactions included having blocked understanding of clients (Hayes et al., 1998).

Research also supports that therapists’ misjudgments of how often the client talked about particular issues is another covert countertransference response (Cutler, 1958; Gelso et al., 1995; Gelso & Hayes, 2007; Rosenberger & Hayes, 2002a; Singer, Sincoff, & Kolligian, 1989). Cutler was one of the first to empirically document that therapists distort what occurs in therapy by over or under reporting what the client actually discussed or did in therapy. Cutler’s findings were not fully supported by later research by Hayes and Gelso (1993). However, in their review, Gelso and Hayes (2007) described two studies (Fiedler, 1951; McClure & Hodge, 1987) that demonstrate that if countertransference is elicited in therapists, then therapists may view clients as being overly similar to or overly dissimilar from themselves. These studies show that therapists’ over- or under-identification with clients results in, or from, therapists liking or disliking their clients (Fiedler, 1951; McClure & Hodge, 1987).

Limitations of research on therapists' internal countertransference responses include finding sufficient numbers of therapist participants who are willing and able to report their countertransference reactions and finding means to accurately measure therapists' countertransference (Gelso & Hayes, 2007; Hayes, 2004; Hayes et al., 1998; Najavits, 2000). Najavits questioned if emotions can accurately be separated from attitudes and cognitions when studying therapists' responses to clients. Beyond emotional and cognitive manifestations of countertransference, it is crucial to review research on behavior that occurs when countertransference is internally elicited.

Countertransference Behavior.

Research shows that countertransference can manifest itself in a blend of avoidance and approach responses (Gelso & Hayes, 2007; Hayes et al., 1998; Rosenberger & Hayes, 2002a). This research is consistent with brain research that shows that we consciously and/or automatically tend to pay attention to that which makes us feel good and avoid or ignore that which elicits negative emotions (Beer & Lombardo, 2007). Gelso and Hayes note that avoidance is the most common countertransference behavior found in countertransference research (Bandura et al., 1960; Cutler, 1958; Gelso et al., 1995; Hayes & Gelso, 1991; Hayes & Gelso, 1993; Hayes et al., 1998; Latts & Gelso, 1995; Lecours, Bouchard, & Normandin, 1995; Mohr, Gelso, & Hill, 2005; Rosenberger & Hayes, 2002a; Yulis & Kiesler, 1968). In their qualitative study, Hayes et al. found that all eight experienced therapists reported experiencing avoidance reactions in their work. Avoidance reactions included therapists distancing themselves from the client. Hayes et al. found that these therapists also reported experiencing negative feelings such as anger, frustration and anxiety.

Research supports that another behavioral manifestation of countertransference is therapists either being overly involved or not providing enough psychological space from clients (Gelso et al., 1995; Gelso, Hill, Mohr, Rochlen, & Zack, 1999; Hayes et al., 1998; Williams, Judge, Hill, & Hoffman, 1997; Rosenberger & Hayes, 2002a; Smith, Kluehn, & Hutschemaekers, 2007). The countertransference response of over-involvement can manifest as therapists praising clients too much, being overly responsible for clients' improvement and well-being (Gelso et al., 1999), over-identifying with clients (Hayes et al., 1998), and over-empathizing with clients (Hayes et al., 1998). Despite marginal reliability for measures of over-involvement, over-involvement has nonetheless been found to be a common challenge for counselor trainees (Gelso et al., 1995).

Factor analysis research supports that therapists' over- or under-involvement with clients can be viewed as positive or negative countertransference (Friedman & Gelso, 2000). Positive countertransference was shown to be associated with therapists' over involvement (Friedman & Gelso, 2000). Conversely, negative countertransference was shown to be associated with therapists' under involvement. (Friedman & Gelso, 2000). Both positive and negative countertransference can help or impede the process of therapy (Friedman & Gelso, 2000; Gelso et al., 1995; Gelso et al., 1999; Hayes et al., 1998; Hill et al., 1996), depending on how therapists manage their countertransference (Gelso & Hayes, 2007).

Effects of Countertransference

Even though countertransference can be used to benefit psychotherapy, theory and empirical research suggest that unmanaged countertransference is typically detrimental in psychotherapy (Gelso & Hayes, 2001; Gelso & Hayes, 2007; Harris, 1999; Hayes & Gelso, 1993; Hayes et al., 1998; Hayes et al., 1997; Lambert et al., 1977; Ligiero & Gelso, 2002; Pope

& Tabachnick, 1993; Rosenberger & Hayes, 2002a; Van Wagoner et al., 1991). As previously mentioned, unmanaged countertransference can lead to therapists avoiding clients' content, overly involving themselves with clients' issues and remembering clients' content in therapy sessions differently than how it actually occurred (Gelso & Hayes, 2007). Therapists may have their decisions about clients' treatment affected by countertransference (Hayes et al., 1998).

In their review, Gelso and Hayes (2007) point out that the only study that directly examines residual effects of countertransference behavior on therapy outcome is Hayes et al.'s (1997) study of 20 brief therapy cases. This study found that countertransference behavior had little relation to treatment outcome as measured by clients, their therapists, and supervisors of therapists. However, in cases with moderate to poor outcome, countertransference behavior was strongly and inversely related to outcome. Hayes et al. implied that perhaps countertransference behavior has more of an impact on therapy outcome when there is a poor working alliance.

This is supported by later research that found an inverse relationship between countertransference behavior and the strength of the working alliance (Gelso & Hayes, 2001; Ligiero & Gelso, 2002). Rosenberger and Hayes (2002) found that therapists' countertransference management was positively correlated with clients' perceptions of working alliance quality. In addition, research has also demonstrated a positive correlation between decreased client functioning and therapists' unmanaged anger (see Lambert et al., 1977 for review). Thus, the detrimental effects on psychotherapy caused by unmanaged countertransference necessitate means to manage countertransference. The next section will review empirically supported factors that contribute to countertransference management including therapists' self-insight, conceptualizing ability, empathy, self-integration, and anxiety management.

Countertransference Management

Research has shown beneficial outcomes for therapists who effectively manage countertransference (Gelso, Latts, Gomez, & Fassinger, 2002; Rosenberger & Hayes, 2002a). Gelso et al. found that therapists in training who had more of the characteristics that contribute to countertransference management were also rated as having better treatment outcomes. Thus, countertransference management may affect therapy outcome (Gelso et al., 2002).

Van Wagoner, Gelso, Hayes, and Diemer (1991) found empirical support for five therapist qualities that facilitate countertransference management: self-insight, conceptualizing ability, empathy, self-integration, and anxiety management. These components make up the Countertransference Factors Inventory (CFI). Results from this study supported that these five countertransference management qualities differentiate excellent therapists from average therapists. These five components of countertransference will be reviewed along with research on these components.

Therapists' Self-Insight.

According to Van Wagoner et al. (1991), therapists' self-insight is defined as the degree to which therapists have awareness of their own feelings, thoughts, and behavior and their origins. As Gelso and Hayes (2007) describe, we can only understand others to the extent that we understand ourselves. In reviewing the research on self-insight, Gelso and Hayes note that therapists may experience times of discomfort as they get to know themselves.

In considering how to gain self-insight, Baehr (2004) interviewed 12 psychologists in search of practices that foster self-insight and self-awareness. Meditation, self-care, and self-reflection were all identified as contributing to self-insight, which in turn aids countertransference management. In specifically considering meditation, Baehr's participants

suggested that mindfulness practices contributed to their self-insight. This notion will be revisited later in the literature review on psychotherapists and mindfulness.

According to Gelso and Hayes (2007), research on self-insight is mixed. Self-insight has been identified as a factor that separates superb therapists from average therapists (Van Wagoner et al., 1991) and has been identified as a vital part of countertransference management (Hayes, Gelso, Van Wagoner, & Diemer, 1991). However, as Gelso and Hayes point out, some studies have not found a relationship between the self-insight of therapists and treatment outcome (Hayes et al., 1997) and countertransference behavior (Gelso et al., 1995). Thus, self-insight alone may not be sufficient to manage countertransference.

Therapists' Conceptualizing Ability.

Conceptualizing ability is the degree to which therapists have the capacity to conceptualize the dynamics between themselves and clients in the therapeutic relationship (Van Wagoner et al., 1991). Since a cognitive framework provides therapists with information about containing or dealing with countertransference reactions, Gelso and Hayes (2007) suggest that conceptualizing ability alone may help minimize countertransference behavior, although research to date has not found a main effect for conceptualizing ability. Instead, research suggests that when a conceptual framework to understand countertransference is coupled with self-awareness, therapists show less countertransference behavior (Latts & Gelso, 1995; Robbins & Jollovski, 1987).

Empathy.

Empathy has also been identified as a vital part of countertransference management (Van Wagoner et al., 1991). Empathy refers to the extent to which therapists possess both a conceptual understanding of another person's experience and the ability to temporarily identify with another

person's thoughts and feelings as though they were in the other person's shoes (Van Wagoner et al., 1991).

In their research review, Gelso and Hayes (2007) point to several studies that have demonstrated that empathy aids in preventing countertransference behavior (Baehr, 2004; Hayes et al., 1997; Peabody & Gelso, 1982). Peabody and Gelso found that therapists' ability to empathize was positively correlated with therapists' awareness of having countertransference feelings. Therapists' awareness of countertransference feelings was subsequently inversely correlated with displaying countertransference behavior (Peabody & Gelso, 1982). Hayes et al. found that previous supervisors' ratings of the empathic ability of therapists in training were inversely related to countertransference behavior with current clients. Thus, research supports that therapists' empathy helps inhibit countertransference behavior.

Self-Integration.

In addition to empathy, conceptualizing ability, and self-insight, self-integration is another vital component to help manage countertransference. According to Van Wagoner et al. (1991), self-integration refers to therapists' capacity to differentiate themselves from others, including the ability to prioritize clients' needs over their own needs. In addition, self-integration refers to therapists' possession of a stable, coherent identity and psychological health (Van Wagoner et al., 1991). Gelso and Hayes (2007) propose that self-integration encompasses the common sense notion that therapists who have issues that are more resolved or have fewer internal conflicts are likely to have fewer countertransference problems.

An empirical study exploring countertransference behavior among counseling psychology doctoral students and the five countertransference management factors provides additional empirical support for counselors' empathy and self-integration negatively relating to

countertransference behavior by the counselor (Hayes et al., 1997). Hayes et al. found that supervisors' ratings of counselors' empathy and self-integration as measured by the CFI were negatively correlated with counselors' avoidance behavior as measured by counselors' in-session verbal behavior. Thus, Hayes et al. provides support that if counselors possess empathy and self-integration, countertransference behavior may be less likely to occur.

Anxiety Management.

Lastly, both theory and research support that anxiety management is vital to countertransference management. Anxiety management refers to the degree to which therapists handle their state anxiety in counseling and any trait anxiety they experience (Van Wagoner et al., 1991). As Gelso and Hayes (2007) point out, research has shown that both state anxiety and trait anxiety predict countertransference behavior and that therapists' state anxiety is an emotional indicator of countertransference (Gelso et al., 1995; Hayes & Gelso, 1991; Hayes & Gelso, 1993; Hayes et al., 1998; Yulis & Kiesler, 1968). Generally, research supports that therapists who effectively manage anxiety are more likely to better manage countertransference responses, and in turn exhibit less countertransference behavior (Fauth & Nutt-Williams, 2005; Gelso et al., 1995; Gelso et al., 2002; Hayes & Gelso, 1991; Yulis & Kiesler, 1968).

Gelso et al. (2002) studied client improvement ratings from 32 therapist trainees and their supervisors in relation to countertransference management ability. Gelso et al. found that the total CFI score and the subscales of anxiety management and conceptualizing ability positively correlated with supervisors' and trainees' ratings of therapy outcome. Thus, the five countertransference management factors including anxiety management may prevent countertransference behavior and positively impact therapy outcome (Gelso & Hayes, 2007).

The CFI (Van Wagoner et al., 1991) which assesses the five countertransference management factors will be used in this study and will be further discussed in Chapter 3.

Strengths and Limitations to Countertransference Research

Limitations to countertransference research include imperfect aspects of analogue and field studies. Rosenberger and Hayes (2002b) note that as research provides evidence that external countertransference responses can be identified by approach and/or avoidance behavior, internal validity of analogue studies has increased. However, the use of analogue studies in countertransference research has been criticized for having methodological problems and having limited external validity (Kholooci, 2007). In addition, analogue studies in countertransference research have been criticized for potentially not being able to capture subtle aspects of countertransference manifestations (Kholooci, 2007).

Field studies have enabled researchers to naturally capture and study countertransference (Rosenberger & Hayes, 2002b). However, self-report measures, and using therapists in training as participants, are limitations to field study research (Gelso & Hayes, 2007; Kholooci, 2007; Rosenberger & Hayes, 2002b). In addition, as previously mentioned, finding therapists who are willing and able to share their authentic experience of countertransference also make capturing countertransference challenging (Gelso & Hayes, 2007; Rosenberger & Hayes, 2002b).

Despite these limitations, research on countertransference management has shown that unmanaged countertransference can impede therapy (Gelso & Hayes, 2001; Gelso & Hayes, 2007; Harris, 1999; Hayes & Gelso, 1993; Hayes et al., 1998; Hayes et al., 1997; Lambert et al., 1977; Ligiero & Gelso, 2002; Pope & Tabachnick, 1993; Rosenberger & Hayes, 2002a; Van Wagoner et al., 1991). Based on their empirical findings, Van Wagoner et al. suggested that therapists in training need means to develop particular qualities in order to manage

countertransference when working with clients. This has been consistently supported by theory and research on countertransference management (Gelso & Hayes, 2001; Gelso & Hayes, 2007; Hayes & Gelso, 2001; Hayes et al., 1991). Theory has suggested that mindfulness meditation can facilitate therapists' awareness of their countertransference (Chalif, 2001; Epstein, 1995, 2004; Fulton, 2005; Hick & Bien, 2008). Empirical findings have supported this proposition (Cooper, 1999; Dreifuss, 1990; Finn & Rubin, 2000; Kholooci, 2007). In considering mindfulness meditation as a potential tool to facilitate therapist trainees' acquisition of the five factors of countertransference management, research on mindfulness will be reviewed.

Mindfulness

Definition

Mindfulness has a range of definitions as the term refers to a psychological process of being mindful, a practice that develops mindfulness, and a theoretical concept (Germer, Siegel, & Fulton, 2005; Kostanski & Hased, 2008) that can be applied to clinical, educational, and scientific contexts (Siegel, 2007b). The word *mindfulness* originally comes from the Pali word *sati* which means having awareness, attention, and remembering (Bodhi, 2000; Germer et al., 2005). Mindfulness can simply be defined as “moment-by-moment awareness” (Germer et al., 2005, p. 6). Other definitions include a way of perception in which one re-trains the mind in experiencing oneself, others, and one's environment objectively as they exactly are (Gunaratana, 1990; Wallace, 2001; Young, 1997), and “a state of *psychological freedom* that occurs when attention remains quiet and limber, *without attachment* to any particular point of view” (Martin, 1997, p. 291, italics included in original text).

Mindfulness can be a state, a trait, and a way of being in the world (Germer et al., 2005). Mindfulness can also be considered a mode of processing in which receptive attention is given to

the bare facts of internal and external stimuli (Brown, Ryan, & Creswell, 2007b; Germer et al., 2005). Although the bulk of the literature explores mindfulness enhanced by meditation, mindfulness is an innate human capacity that is not dependent on meditation to be elicited (Brown, Ryan, & Creswell, 2007a; Wachs & Cordova, 2007; Young, 1997).

It is relevant to note that the term *mindfulness* as used in this paper does not include the cognitive model of mindfulness applied to the field of education proposed by Langer (Langer, 2000a, 2000b). While there is overlap between the construct of mindfulness used by Langer and the construct of mindfulness developed by meditation, Langer has cautioned that the two constructs of mindfulness derive from different cultural and historical backgrounds and should not be compared (Langer, 2000a, 2000b).

In examining mindfulness empirically, it is necessary to clarify how mindfulness is conceptualized in the current study. In the present study, mindfulness is viewed as a multidimensional construct with five measurable facets: 1) observing and noticing sensations, 2) describing one's internal experience with words, 3) acting with awareness and concentration, 4) being non-reactive toward one's inner experience, and 5) being non-judging of experience (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). The instrument used to measure these dimensions of mindfulness will be described in Chapter 3.

Mindfulness Meditation

Although there are several disciplines and practices that can cultivate mindfulness (e.g., yoga, tai chi, qigong; Siegel, 2007b), the majority of theoretical writing and empirical research on the subject has focused on mindfulness developed by mindfulness meditation. Meditation refers to:

A family of self-regulation practices that focus on training attention and

awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and/or specific capacities such as calm, clarity, and concentration (Walsh & Shapiro, 2006, p. 228).

While a myriad of meditation practices including Tibetan and Zen Buddhist meditation styles also cultivate mindfulness, the term *mindfulness meditation* is typically synonymously used with Vipassana, a form of meditation that derives from Theravada Buddhism (Gunaratana, 1990; Young, 1997). Vipassana is a Pali word for insight or clear awareness and is “a direct and gradual cultivation of mindfulness or awareness” (Gunaratana, 1990, p. 21). Mindfulness is systematically cultivated in Vipassana practice by applying one’s attention to one’s body sensations, feelings, mental states (i.e., thoughts), and surrounding environment (Bodhi, 2000; Germer, 2005; Germer et al., 2005; Gunaratana, 1990; Wallace, 2001; Young, 1997).

Mindfulness meditation differs from concentrative meditation practices such as transcendental meditation, which involves the practitioner focusing on a single object such as a mantra, sound, object or sensation (Gunaratana, 1990). While one may assume that any form of meditation may have an equally-beneficial impact on the practitioner, mindfulness meditation has been shown to activate the middle prefrontal brain associated with both self-observation and meta-cognition more than concentrative forms of meditation (Cahn & Polich, 2006). Thus, different styles of meditation practice elicit distinctively different patterns in brain activity (Cahn & Polich, 2006; Lazar et al., 2005).

Theorized Benefits of Mindfulness Meditation.

From a classical Buddhist perspective, outcomes of mindfulness meditation are called the four immeasurables: loving kindness, empathic joy, compassion, and equanimity (Bien, 2008; Wallace, 2001). Loving kindness represents the ability to offer happiness and joy to oneself and others (Bien, 2008). Empathetic joy in this context refers to the ability to share in others' happiness (Bien, 2008). Compassion is rooted in a desire to alleviate other's suffering (Bien 2008). Equanimity is defined as having an even-natured and balanced form of emotional intelligence that fosters the ability to accept whatever comes (Bien, 2008; Young, 1997). As meditation practice increases mindfulness, mindfulness increases the quality of one's relationships (Young, 1997). Specifically, as mindfulness increases, one's compassion for oneself is theorized to increase which helps develop kindness and compassion for others (Brown et al., 2007b; Bruce, 2006; Gunaratana, 1990; Shaver, Lavy, Saron, & Mikulincer, 2007; Wallace, 2001).

In the field of psychology, mindfulness meditation is theorized to develop and increase empathy (Fulton, 2005; Martin, 1997; Morgan & Morgan, 2005; Walsh & Shapiro, 2006), self-control (Bishop et al., 2004; Masicampo & Baumeister, 2007), objectivity (Adele & Feldman, 2004; Brown et al., 2007b; Leary & Tate, 2007; Shapiro, Carlson, Astin, & Freedman, 2006), emotional regulation (Adele & Feldman, 2004; Bishop et al., 2004; Masicampo & Baumeister, 2007; Shapiro et al., 2006; Shaver et al., 2007; Siegel, 2007b), affect tolerance (Fulton, 2005), and cognitive, behavioral, and emotional flexibility (Adele & Feldman, 2004; Brown et al., 2007b; Shapiro et al., 2006). Mindfulness theory proposes that mindfulness meditation increases baselines of equanimity (Fulton, 2005; Germer et al., 2005; Morgan & Morgan, 2005; Shapiro et al., 2006; Walsh & Shapiro, 2006; Young, 1997), concentration (Morgan & Morgan, 2005;

Walsh & Shapiro, 2006; Young, 1997), and mental clarity (Brown et al., 2007b; Young, 1997), and decreases levels of emotional reactivity (Leary & Tate, 2007; Shapiro et al., 2006) and avoidance behavior (Shapiro et al., 2006). Mindfulness meditation is also theorized to increase emotional intelligence (Walsh & Shapiro, 2006), attention capacity (Bishop et al., 2004; Fulton, 2005; Morgan & Morgan, 2005; Walsh & Shapiro, 2006), and the ability to approach life with non-judgment and acceptance (Fulton, 2005; Young, 1997).

Research on Mindfulness

Neurological Research on Mindfulness.

Evidence is gradually emerging from neurological research that mindfulness meditation enhances many of the skills theorized by scholarly literature and by both quantitative and qualitative research (see Cahn & Polich, 2006 and Siegel, 2007b for reviews). Current neurological research examines the effect of mindfulness meditation on neurological processes and functions of the brain. Mindfulness has been shown to enhance middle prefrontal lobe functions such as bodily regulation, attuned communication, emotional balance, response flexibility, empathy, insight or self-knowing awareness, morality, intuition, and fear modulation (Siegel, 2007b). There is also evidence that mindfulness meditation has numerous health benefits including increased immune functioning (see Lutz, Dunne, and Davidson, 2007 for review of physical health benefits). In this section, research on how meditation changes the brain over time is reviewed. Evidence of the development of skills most relevant for therapists also is reviewed including empathy, emotion-regulation, non-reactivity, and response flexibility (Fauth, Gates, Vinca, Boles, & Hayes, 2007; Norcross, 2002). These intertwined skills all share the same core origins in the brain.

Meditation experience and mindfulness.

Historically, there has been a large gap in both neurological and quantitative research in understanding how meditation experience impacts psychological baselines that change over time (Lin et al., 2007; Lutz, Dunne, & Davidson, 2007). Previous quantitative research suggests that there may be little to no relationship between mindfulness achieved during meditation and trait mindfulness (Thompson & Waltz, 2007). However, Grossman (2008) has criticized that what he calls “hybrid” measurements of mindfulness, such as ones used in the Thompson and Waltz study, lose the original meaning of mindfulness and psychometrically may not correlate highly with one another (p. 406). Grossman (2008) consider hybrid measurements of mindfulness to be measurements that conceptually derail from the Buddhist notion of mindfulness. Such limitations in research methods contribute to confusing study results that widen the gap between science and meditation (Grossman, 2008). However, the empirically sound study of neuroscience now helps explain trait mindfulness.

Neuroplasticity, the re-wiring in the brain that occurs as a result of experience, now explains how repeated practice of mindfulness meditation literally changes the physical structure and functioning of the brain (Siegel, 2007a). This explains how mindfulness meditation’s creation of effortful internal states ultimately become effortless traits of meditators over time (Farb et al., 2007; Siegel, 2007a).

Although research on experienced meditators is in its infancy, Lazar et al. (2005) found that brain regions associated with sensitivity to internal stimuli, attention, and sensory processing were thicker in long-term mindfulness meditators than matched controls. Lazar et al.’s findings offer the first evidence of experience-dependent structural changes in the brain due to meditation practice. Consistent with the notion of neuroplasticity, this research provides evidence that the

longer one practices mindfulness meditation, the more one benefits from its effects. This research is also consistent with research that supports that mindfulness meditation practice leads to increased mindfulness, and subsequent improved well-being and psychological symptom reduction (Carmody & Baer, 2008).

Research on neuroplasticity begins to explain how the developmental stages of mindfulness in meditators may develop. Quantitative research has found that there is an initial learning period of one year of regular practice of mindfulness meditation during which there is no increase in self-actualization (Compton & Becker, 1983). While it was not identified the length of time or frequency of meditation practice that quantified it to be regular meditation practiced in this study, it was found that after one year of regular mindfulness meditation practice, the benefits of meditation practice become measurable (Compton & Becker, 1983). However, meditation's beneficial outcomes may not correlate linearly with the length of time practicing meditation (Lin et al., 2007). In other words, there may be developmental spurts of mindfulness meditation's measurable benefits.

Given Lin et al.'s findings, perhaps people gain the benefits of meditation in growth spurts over the course of regular long-term meditation practice. Questions remain regarding how the benefits of meditation develop over time once they are measurable after one year of practice. Future research on how the benefits of meditation practice accumulate over time is needed (Davis & Hayes, in press). In addition, more research is needed to better understand the developmental stages of learning meditation among meditators and the nature of incremental growth periods or increases in the beneficial outcomes of practicing meditation over time.

Future research on neuroplasticity may help explain the relationship among length and quality of meditation practice, developmental stages of meditators and quantifiable outcomes.

Thus, more research is needed to better understand how meditation practice experience affects subsequent learning of meditation and cumulative benefits of meditation practice over time.

Empathy.

From his review of current brain research, Siegel (2007b) proposes that self-empathy and empathy for others are created from the internal self-awareness and attunement that mindfulness develops. Attunement, a means of accurately and receptively sensing with awareness, is a vital component of relationships with self and with others (Siegel, 2007a, 2007b). Siegel (2007b) proposes that “mindfulness involves a form of internal attunement that may harness the social circuits of mirroring and empathy to create a state of neural integration and flexible self-regulation” (p. 132). This implies that as meditators’ level of mindfulness increases, their ability to internally attune increases which neurologically includes increases in their ability to empathize and self-regulate (Siegel, 2007b). This in turn creates more intimate relationships with self and others (Siegel, 2007b).

Emotion regulation.

In terms of understanding the relationship between how mindfulness affects emotion regulation, it is important to first briefly consider what we know about emotion regulation in the brain. While this is a gross oversimplification, brain research thus far shows that emotion regulation happens at the same time as emotion generation (Beer & Lombardo, 2007; Davidson, Jackson, & Kalin, 2000; Goss & Thompson, 2007; Ochsner, Bunge, Gross, & Gabrieli, 2002). There is evidence that mindfulness helps develop more effective emotion regulation in the brain (Davidson et al., 2000; Davidson, 2004; Farb et al., 2007; Siegel, 2007b). For example, in Siegel’s (2007b) review, one study found a left anterior shift in function during emotion-provoking stimuli tests, which shows that mindfulness practice facilitates people effectively

regulating their emotions in a positive way by approaching their emotions, rather than via emotional withdrawal (Davidson, 2004). This is consistent with other research that found that mindfulness as a trait is correlated with effective emotion regulation (Siegel, 2007b).

Furthermore, there is evidence that meditation can cause increased positive affect and decreased anxiety and other negative affect (Davidson et al., 2004). Thus, meditation may both elicit more positive emotions and enable more effective emotion regulation.

Non-reactivity and response flexibility.

Research shows that mindfulness meditation practice enables people to become non-reactive which involves both internal emotion regulation and response flexibility (Davidson, 2000; Siegel, 2007a, 2007b). Evidence supports that mindfulness meditators develop the skill of self-observation which neurologically disengages automatic pathways created from prior learning and enables present moment input to be integrated in a new way (Siegel, 2007a). Siegel (2007a) writes that once the ability to notice the contents of the mind become “readily accessible through intentional practice, the capacity to alter habitual patterns is created and the possibility becomes available for relief from self-preoccupied rumination, self-defeating thought-patterns, negative autobiographical narratives and maladaptive patterns of emotional reactivity” (p. 260). Thus, mindfulness meditation practice develops an ability to distinguish subjective ‘top-down’ autobiographical information from prior learning and present moment experience (Farb et al., 2007; Siegel, 2007a). Implications for how non-reactivity and response flexibility developed by mindfulness may affect countertransference management will be discussed later in this chapter.

Meditation activates regions of the brain associated with more adaptive responding to stressful or negative situations (Cahn & Polich, 2006; Davidson et al., 2003). Activation of this region of the brain corresponds with faster recovery to baseline after being negatively provoked

(Davidson, 2000; Davidson et al., 2000). These findings are consistent with other research that after an 8-week mindfulness meditation intervention, meditators had an increased ability to resist impulses and focus their attention (Siegel, 2007b). Thus, there is empirical support that mindfulness increases people's capacity to regulate emotions, as well as to have response flexibility and empathy (Davidson, 2000; Siegel, 2007b). It also decreases reactivity (Davidson, 2000; Siegel, 2007b).

Strengths and limitations.

Neurological research on meditation is limited in its contributions to the field from the challenges inherent in any meditation research. These include difficulty controlling for various levels of expertise, the heterogeneity of meditative states practitioners have formally studied, and the lack of appropriate control populations (Lutz et al., 2007). A challenge in research focused on experienced meditators is quantifying the number of cumulative hours experienced meditators have practiced throughout life (Lutz et al., 2007). Despite its limitations, neurological research is currently the only means to capture internal experiences of meditators that does not rely on interviews or self-report measures. Future brain research offers great potential for learning neurophysiological processes of meditation and the health benefits of long-term practice on the brain (Lutz et al., 2007; Young, 1997).

Quantitative and Qualitative Mindfulness Research.

Through quantitative and qualitative research, mindfulness meditation has been shown to provide numerous benefits including reducing psychological distress (Coffey & Hartman, 2008; Ostafin et al., 2006), perceived stress, and rumination (Shapiro, Oman, Thoeresen, Plante, & Flinders, 2008). Whereas the literature on the benefits of applying mindfulness approaches to clients is vast (see Germer et al., 2005 for review), there is relatively little literature on the effects

of mindfulness on psychotherapists, and most of this literature is not empirical. In order to extrapolate from what is known empirically to what may be true of psychotherapists and trainees, four areas of research relevant to the current study will be reviewed: 1) research on mindfulness in close relationships, 2) research on health care trainees and therapists who meditate, 3) research on the effects of long-term mindfulness meditation practice, and 4) research specifically on mindfulness and countertransference.

Trait mindfulness and interpersonal behavior.

In considering the relations among countertransference management, differentiation of self, and mindfulness, it is important to understand how mindfulness affects interpersonal behavior. Neurological research has shown how mindfulness meditation develops skills that subsequently promote healthy relationships (Siegel, 2007b). So what does the research on mindfulness and interpersonal behavior imply about the therapeutic relationship? In this section, research on mindfulness in intimate relationships will be reviewed. Although all of the reviewed literature is on mindfulness in the context of intimate relationships, implications for the therapeutic relationship are made.

Research on how mindfulness impacts interpersonal behavior is quickly growing as evidenced by notions of mindful relating (Wachs & Cordova, 2007) and empathic responding (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007). Evidence supports that couples' trait mindfulness predicted relationship satisfaction (Barnes, Brown, Krusemark, Campbell, & Rogge, 2007; Wachs & Cordova, 2007) and greater ability to respond to relationship stress in a constructive manner (Barnes et al., 2007). There is evidence that higher trait mindfulness in couples is associated with greater skill in identifying and communicating emotions, empathizing, and regulating anger and hostility (Wachs & Cordova, 2007). Barnes et al. (2007) found that

people with higher trait mindfulness reported less emotional stress in response to relationship conflict and entered conflict discussion with less anger-hostility and lower levels of anxiety. Behavior of dating couples showed that mindfulness was inversely related to verbal aggression, negativity and conflict (Barnes et al., 2007). Furthermore higher levels of mindfulness marginally predicted more support of and less withdrawal from one's partner (Barnes et al., 2007). Thus, empirical evidence suggests that mindfulness protects against emotionally stressful effects of relationship conflict (Barnes et al., 2007) and predicts relationship satisfaction (Barnes et al., 2007; Wachs & Cordova, 2007).

In specifically looking at the relationship between mindfulness and interpersonal non-reactivity, mindfulness is positively associated with the ability to express oneself in various social situations (Dekeyser, Raes, Leijssen, Leyson, & Dewulf, 2008). Evidence shows that mindfulness is correlated with less distress contagion and acting with increased awareness in social situations (Dekeyser et al., 2008).

In considering the implications of research on the relationship between mindfulness and intimate relationships and interpersonal behavior, it would seem that the above-mentioned findings would translate to the therapeutic relationship. It goes without saying that the therapeutic relationship differs from most emotionally intimate relationships since it is inherently not reciprocal in its exchanges and disclosures. However, given that the therapeutic relationship is emotionally intimate and is interpersonal in nature, trait mindfulness of therapists may aid therapists' ability to manage countertransference.

Health care and psychotherapist trainees who meditate.

Beyond neurological research, most research on mindfulness meditation has focused on Mindfulness-Based Stress Reduction (MBSR) (see Baer, 2003 for review of MBSR as a clinical intervention; see Grossman et al., 2004 for review of health benefits of MBSR). Adapted from Vipassana by Jon Kabat-Zinn, MBSR is an intensive, structured 8-week group intervention that includes mindfulness meditation practice, self-compassion and body awareness exercises, guided visualizations and group processing (Kabat-Zinn, 1990). Participants of MBSR programs are typically instructed to practice skills for at least 45 minutes per day for 6 days a week (Kabat-Zinn, 1990).

Evidence shows that MBSR decreases stress symptoms in health care students and professionals, including anxiety and depression, and increases self-reports of empathy, quality of life, and self-compassion (Shapiro, Astin, Bishop, & Cordova, 2005; Shapiro, Schwartz, & Bonner, 1998). MBSR has been shown to lower total mood disturbance self-report scores including stress, fatigue, and anxiety in medical students (Rosenzweig, Reibel, Greeson, & Brainard, 2003). Using qualitative and quantitative measures, nursing students reported higher levels of quality of life and a significant decrease in psychological symptoms following exposure to MBSR (Bruce, Young, Turner, Vander Wal, & Linden, 2002).

Research on the effects of MBSR interventions on psychotherapist trainees suggests mindfulness practices positively influence factors and skills that impact their effectiveness as therapists. In a 4-year qualitative study, counseling students reported considerable positive effects on their counseling skills and therapeutic relationships including being more attentive to the therapy process, more comfortable with silence, and more attuned with oneself and clients after taking a 15-week course that included mindfulness meditation, yoga and qigong based on

MBSR (Newsome, Christopher, Dahlen, & Christopher, 2006; Schure, Christopher, & Christopher, 2008). Increased mindfulness was correlated with higher self compassion, lower perceived stress, lower rumination, and lower trait anxiety in therapists in training who were taught MBSR for self-care (Shapiro, Brown, & Biegel, 2007).

These findings are consistent with two separate studies in which counselors in training who participated in non-MBSR mindfulness interventions reported significant increases in empathy as measured by affective sensitivity (Lesh, 1970) and increased wellness scores (Rybak & Russell-Chapin, 1998). Lesh found that counselor trainees who practiced Zen meditation were more aware of feelings of clients in a video-tape of various client-counselor interactions, compared with a control group. Similarly, in a non-MBSR mindfulness meditation intervention study on Chinese college students, people who participated in a mindfulness meditation intervention had increased attention and self-regulation, lower depression, anxiety, fatigue, and anger, and significantly decreased stress-related cortisol, and increased immunoreactivity (Tang et al., 2007). Thus, mindfulness meditation interventions show promising results for counselor trainees.

Strengths and limitations of MBSR research.

Research on MBSR has been challenged by methodological issues (Baer, 2003; Bishop, 2002; Kabat-Zinn, 2003) and has received criticisms similar to those of meditation research in general (Caspi & Burleson, 2005). Baer points out that mindfulness-based intervention studies generally have small sample sizes, use self-report measures, and have short post-intervention follow-ups. In addition, Baer emphasizes that the lack of control groups also is a shortcoming in many mindfulness-based intervention studies.

Bishop (2002) argues that a major limitation of MBSR research is that there is no evidence that mindfulness meditation practiced within MBSR programs directly elicits mindfulness. Bishop suggests that benefits attributed to MBSR could be from the effects of group social support or increased self-efficacy. Bishop emphasizes the need to demonstrate that MBSR produces mindfulness through randomized controlled trials.

Since Bishop's criticism, mindfulness has been shown to mediate the relationship between formal meditation practice and increased psychological functioning (Carmody & Baer, 2008). Carmody and Baer (2008) used data from participants from nine MBSR groups from a medical school MBSR program who consented that their self-report data that was being routinely collected could be used for research purposes. Carmody and Baer (2008) have found that time spent formally practicing MBSR significantly correlates with an increase in four out of five of the facets of mindfulness as measured by the Five Facet Mindfulness Questionnaire (FFMQ). Namely, time spent practicing MBSR significantly correlated with observing internal and external environment, emotions and cognitions, acting with awareness, non-judging of internal experience, and non-reactive to internal experience. Time spent practicing MBSR did not significantly correlate to the FFMQ facet of describing one's experience. Participants' practice of MBSR significantly correlated with psychological well being as measured by the Scales of Psychological Well-Being and psychological symptoms as measured by the Brief Symptom Inventory. For example, participants practicing MBSR significantly reported changes in psychological symptoms such as increased interpersonal sensitivity and decreased anxiety, phobic anxiety, psychoticism, and global severity. Carmody and Baer found that when analyzed by itself, sitting meditation practice significantly correlated with acting with awareness and non-

reactivity mindfulness facets, decreased symptoms of alienation and health concerns, and increased psychological well-being.

While mindfulness has been found to mediate formal meditation and increased psychological functioning, the impact of group membership still needs to be considered. Recent research has found support for Bishop's (2002) proposal that the effect of group membership may affect MBSR outcomes as opposed to any variation in MBSR instructors or instruction (Imel, Baldwin, Bonus, & MacCoon, 2008). Imel, Baldwin, Bonus and MacCoon found that group membership in an MBSR group accounted for 7% of the variance in psychological symptoms, but accounted for none of the variance in medical symptoms. There was no evidence that the group membership effect was due to variation in MBSR instructors (Imel et al., 2008). Imel et al. propose that MBSR instructors keep to rigorous standardization in MBSR instruction and on-going training. Thus, group membership effects more than any variation in MBSR instruction may partially explain meditators' increase in psychological functioning (Imel et al., 2008).

Lastly, the poor to moderate validity of many measures of mindfulness further limits research on MBSR (Bishop, 2002; Kabat-Zinn, 2003). Kabat-Zinn argues that like any intervention, the delivery of MBSR may vary between MBSR instructors despite rigorous standardized MBSR procedures. In addition, MBSR by nature is flexible and can be adapted to various populations and curricula, which can lead to variation in content and process when MBSR is delivered. MBSR and mindfulness-based interventions can be implemented with a broad variety of both clinical and non-clinical populations who have no prior meditation experience (Kabat-Zinn, 2003). Kabat-Zinn proposes that MBSR interventions are designed to align with the grounded, yet flexible nature of mindfulness itself in that each MBSR program

may be tailored for given groups of participants. Future MBSR research would benefit from more precisely demonstrating the mechanisms of change by exercising greater control over content and process (Baer, 2003; Kabat-Zinn, 2003).

Client outcomes of psychotherapist trainees who meditate.

While MBSR research points to the benefits of mindfulness interventions for health care providers, including psychotherapists and trainees, it is relevant to consider whether the benefits of mindfulness practice extend to therapist trainees' client outcomes. In a German study, 9 counselor trainees who were randomly assigned to practice Zen meditation in a group immediately prior to their counseling sessions reported higher self-awareness compared to 9 non-meditating counselor trainees (Grepmaier et al., 2007). Client outcomes from a total of 124 clients were compared after 9 weeks of treatment between counselor trainees who meditated for 9 weeks and counselor trainee control groups. Clients of counselor trainees who meditated scored higher on standardized assessments of well-being at the end of their treatment compared to the control group (Grepmaier et al., 2007; Grepmaier, Mitterlehner, Wolfhardt, & Nickel, 2006). Clients of the counselor trainees who meditated had greater overall symptom reduction, greater rate of change, and subjectively perceived their treatment results to be better than clients of trainees who did not meditate (Grepmaier et al., 2007; Grepmaier et al., 2006).

While these findings seem promising, three independent studies suggest an unclear relationship between counselor trainees' mindfulness and client outcomes (Bruce, 2006; Stanley et al., 2006; Stratton, 2006). Stanley et al. (2006) studied the relationship between trait mindfulness among 23 doctoral-level clinical psychology trainees in relation to treatment outcomes of 144 adult clients in a university community clinic that used manualized, empirically supported treatments. Trainees' trait mindfulness was measured using the Mindful Attention

Awareness Scale (MAAS) (Brown & Ryan, 2003) and client outcomes were measured by two instruments assessing clients' overall symptom severity, functioning and improvement. Therapist mindfulness was inversely correlated with client outcome. Stanley et al. suggested that one potential reason for these results is that perhaps more mindful therapists have more difficulty executing manualized treatments, which rely on procedural memory, and doing so may be counter-intuitive for mindful therapists.

Stratton (2006) examined the correlation of varying levels of trait mindfulness as measured by the MAAS and the Mindfulness/Mindlessness Scale (MMS) and therapy outcomes as measured by the Outcome Questionnaire 45 (OQ45). Therapist mindfulness was found to not predict client outcomes. This is consistent with other findings that suggest an inverse relationship between therapists' mindfulness and client outcomes (Bruce, 2006; Vinca & Hayes, 2007).

Stratton (2006) pointed to the need for improved measures and more refined constructs of mindfulness to better understand therapists' mindfulness and client treatment outcomes. This is similar to Bruce (2006)'s suggestion that perhaps the more mindful people are, the lower they may be likely to score on a mindfulness self-report because they may be more aware of the degree to which they are mindless. Conversely, Bruce proposes that perhaps people who are mindless (i.e. not mindful) most of the time may assume that they are mindful. Perhaps as mindfulness increases, awareness of the range of being mindfulness increases which may lead to more mindful people being more fine-tuned in their awareness of how mindful or mindless they are in any given moment. Thus, in reviewing these studies of client outcomes of therapists who meditate, these data call into question the validity of self-report measures of trait mindfulness.

It is worthy to note that there was no indication if participants had ever or currently did formally practice mindfulness meditation or other mindfulness practices in the Stanley et al.

(2006), Stratton (2006), or Bruce (2006) studies. The results from the four reviewed studies leave the empirical inquiry into client outcomes of therapists who meditate inconclusive. It is important to highlight that the Stanley et al., Stratton, and Bruce studies measured trait mindfulness among presumably non-meditating therapists as opposed to trait mindfulness among meditating therapists.

Research on Psychotherapists who are Experienced Mindfulness Meditators.

Although the benefits of MBSR programs and other meditation interventions are empirically supported, there is little research on the lasting personal and professional benefits of long-term mindfulness meditation practice among psychotherapists. Research on psychotherapists who are experienced mindfulness meditators is gradually emerging. Consistently, psychotherapists who personally practice mindfulness meditation regularly over time report that it increases their empathy and ability to stay present in their therapeutic work (Aiken, 2006; Dreifuss, 1990; Fredenberg, 2002; Vinca, 2009; Wang, 2007). Other benefits include increased patience, intentionality, gratitude, sense of connectedness, and body awareness (Rothaupt & Morgan, 2007).

Wang (2007) compared two groups of psychotherapists, 8 mindfulness meditators and 8 non-meditators, on quantitative measures of awareness and empathy. The group of meditating therapists was also interviewed. There were no significant quantitative differences between meditating therapists and non-meditating therapists in levels of attention or awareness. However, meditating therapists had significantly greater levels of empathy than therapists who did not meditate. Qualitative data showed higher levels of attention and awareness, nonjudgmental acceptance, empathy, love, and compassion among therapists who meditated.

Dreifuss (1990) interviewed six therapists who practiced one of three mindfulness

meditation styles (Vipassana, Zen, and Vajrayana) for over five years to examine the influence of their meditation practice on their work as therapists. Findings suggested that long-term mindfulness meditation practice can positively impact therapists' ability to distinguish their own experience from their clients' experience and can enrich therapists' clarity in their work with clients. As one participant noted, "What I discovered about meditation teachers and the practice itself is the process of decategorization of oneself and others. The discipline is one of seeing fresh each time what is occurring" (Dreifuss, 1990, p.24). This statement exemplifies that meditation may help develop therapists' ability to conceptualize themselves as separate from clients and may help develop therapists' self-insight.

Results from Dreifuss's (1990) study are consistent with Aiken's (2006) findings from research examining meditating therapists' perspectives on how their mindfulness practice cultivates their ability to effectively use empathy in their therapeutic work. Qualitative interviews were conducted with 6 psychotherapists who had more than 10 years of experience practicing both therapy and mindfulness meditation. Consistent themes from the data found that mindfulness helps therapists develop their ability to experience and communicate a felt sense of clients' inner experiences, be more present to clients' suffering, and better enable clients to give words to their body sensations and feelings.

In reviewing mindfulness research, mindfulness meditation seems to benefit certain critical aspects of the therapy process. To date, evidence does not indicate that therapists' meditation enhances therapy outcome. It is possible that equivalent outcomes are reached through different means or processes among therapists who do and do not meditate. Countertransference management, a critical aspect of the process of psychotherapy, has not yet been extensively studied in relation to mindfulness.

Limitations to Mindfulness Research.

The explosion of mindfulness research in psychosomatic medicine, the study of the relationship between psychological, behavioral, and bodily processes, and in psychological fields has raised questions regarding quantifying the multidimensional nature of mindfulness (see Grossman, 2008 for summary). There is concern that Western operationalizations of the mindfulness construct that are oversimplified or are a hybrid of concepts may minimize and extensively change the original Buddhist meaning of mindfulness (Baer, 2003; Grossman, 2008; Kabat-Zinn, 2003; Walsh & Shapiro, 2006). Fundamental conceptual differences exist in definitions of mindfulness (Brown et al., 2007a, 2007b; Germer et al., 2005; Grossman, 2008; Kostanski & Hassed, 2008; Martin, 1997; Wallace & Shapiro, 2006; Young, 1997) including pivotal differences in trying to measure mindfulness by assessing intentionality, awareness of body sensations, clarity of mental states, verbal expressiveness, and lack of attentiveness in daily life.

Baer (2003) argues that each meditator has a unique subjective experience with meditation, which is difficult to measure. Walsh and Shapiro (2006) suggest that the rich perspectives of meditators and meditation traditions may be missed due to empirical findings of meditation research being interpreted through the potentially limiting lens of Western psychology. Differences between state mindfulness and trait mindfulness are not necessarily clear in research using self-report measures, which subsequently result in limitations of how applicable findings are to the general population.

Grossman (2008) criticizes the lack of substantial personal experience with mindfulness meditation among those who develop mindfulness scales. Grossman notes that self-report measures of mindfulness also tend to have limited construct and criterion-related validity.

Mindfulness self-report measures are also subject to biases typical of any self-report measures including social desirability, the Hawthorne effect, cognitive dissonance, and overestimating due to overconfidence (Grossman, 2008; Heppner, Wampold, & Kivlighan, 2008). Suggestions for alternatives to self-report measures include more emphasis on qualitative approaches (Grossman, 2008), despite qualitative approaches' reliance on participants' self-report. Thus, research on mindfulness continues to be limited by self-report measures.

Mindfulness and Countertransference.

Theory supports that mindfulness meditation could help therapists be aware of countertransference (Chalif, 2001; Finn & Rubin, 2000; Kholooci, 2007). Research suggests that mindfulness can serve as a protective factor against damaging countertransference behavior (Kholooci, 2007). Kholooci examined the relationship between mindfulness as measured by the Five Factor Mindfulness Questionnaire (FFMQ) and therapists' awareness of countertransference as measured by the Countertransference Questionnaire (CTQ). Given that it is the closest single study to date that resembles the current study, Kholooci's study will be reviewed in this section. Kholooci's research methodology and findings will be critiqued and implications for the current study will be made.

Research Methodology.

Kholooci (2007) used the CTQ to measure therapists' awareness of countertransference. In critiquing Kholooci's findings, it is first relevant to examine Kholooci's choice in using CTQ. The CTQ (Zittel & Westen, 2003) is 79-item global measure of all therapists reactions towards their adult clients including assessing therapists' thoughts, feelings, and behaviors expressed towards clients (download at <http://www.psychsystems.ent/lab>). The CTQ is a self-report measure for therapists across theoretical orientations (Kholooci, 2007). The CTQ claims to be "a

normed, psychometrically valid instrument that assesses countertransference patterns in psychotherapy for both clinical and research purposes” (Kholocci, p. 72).

However, after a rigorous literature search, only two published studies to date have used the CTQ besides Kholocci (Betan, Heim, Zittel Conklin, & Westen, 2005; Satir, Thompson-Brenner, Boisseau, & Crisafulli, 2009 in press). (Note that the CTQ is referred to as CQ in the other studies). Betan et al. examined the factor structure and reliability of the CTQ and found that the CTQ can be used to measure diagnostically relevant therapists’ reactions. Betan et al. found eight factors of therapists’ reactions that make up the CTQ: 1) overwhelmed/disorganized, 2) helpless/inadequate, 3) positive, 4) special/over involved, 5) sexualized, 6) disengaged, 7) parental/protective, and 8) criticized/mistreated. These eight factors were found to specifically correlate with DSM-IV personality disorders. Betan et al. propose that the CTQ can help gather “empirical prototypes of common countertransference patterns in specific types of pathology” due to findings that suggest that therapists react to clients with personality disorders in predictable patterns (p. 894). Thus, the only published data on the psychometric properties of the CTQ is one study that validates that the CTQ can be used to assess the relationship between global therapists’ reactions to clients and clients’ personality pathology. This is consistent with the suggested direction of future research using the CTQ (Betan et al., 2005; Betan & Westen, 2008).

Satir et al. (2009) used an altered version of the CTQ for adolescents called the Countertransference Questionnaire for Adolescents (CQA) to assess global therapists’ reactions to clients with eating disorders. Thus, the two other studies that are published to date that used the CTQ used it to assess therapists’ reactions to working with specific client populations; namely, clients diagnosed with personality disorders and adolescent clients diagnosed with

eating disorders. The client populations used in these two studies differ from the general clinical population that Kholooci asked therapists to use the CTQ to reflect on.

It is important to emphasize that Kholooci (2007) was attempting to study countertransference awareness which she acknowledges is not known to be specifically assessed using the CTQ. Kholooci “hypothesized that a moderate or high score on the CTQ indicates that the therapist is actually aware of his or her feelings, thoughts and (inadvertent and intentional) behaviors towards his or her client” (p.73). It seems that Kholooci was theorizing that the CTQ would assess countertransference awareness despite the lack of data demonstrating that the CTQ directly and specifically assesses countertransference awareness. While Kholooci did mention the psychometric data found by Betan et al. (2005), there was no mention that these factors were found by Betan et al. to specifically correlate with DSM-IV personality disorders. Kholooci’s use of the CTQ to assess for countertransference awareness may not align with CTQ’s intended use. Thus, the validity of Kholooci’s findings need to be scrutinized given a potential discrepancy between what Kholooci chose to use the CTQ to assess for and what the CTQ has been used to assess.

In addition, the CTQ uses a totalistic perspective of countertransference in that it assumes that all thoughts, feelings and behaviors of therapists towards their clients are due to countertransference. As previously mentioned, a moderate approach to countertransference as measured by the CFI will be used in the current study. Thus, the basic assumptions underlying Kholooci’s findings need to be considered since they contrast with the underlying definition of countertransference used in the current study.

Findings.

In Kholooci's (2007) study, a national random sample of 203 psychologists and trainees participated in the study, 80% of whom had received personal therapy at some point in their lives. 125 therapists (62% of the total sample) did not meditate at all where as 77 (38% of the total sample) practiced meditation regularly. Of the 77 therapists who regularly practiced meditation, 9 (12%) meditated once per week, 11 (15%) meditated twice per week, 16 (21%) meditated three times per week, 9 (12%) meditated four time per week, 11 (15%) meditated five times per week, 3 (4%) meditated six times per week, 15 (20%) meditated seven times per week, and 2 (3%) meditated eight and ten times per week. The length of meditation practice sessions ranged from 5 minutes to 4.5 hours in which most therapists meditated for less than one hour per sitting (83% of meditating therapists) and 13 (17% of meditating therapists) practiced meditation for more than one hour per sitting. Data on number of years of meditation practice the therapists who meditated were not collected.

Participants were asked to think of the last client they had seen in therapy with whom they had worked for at least 6 sessions in order to fill out the CTQ. The clients that their therapists thought of had the following Axis I diagnoses: 61 (33.9%) major depressive disorder; 60 (33.4%) anxiety disorders; 18 (10%) bipolar disorder and 7 (3.9%) substance abuse/dependence. Most clients (124, 67.8%) did not have an Axis II diagnoses, although 30 (16.4%) were diagnosed with borderline personality disorder and 10 (5.5%) were diagnosed with dependent personality disorder. It is not known how many clients had multiple diagnoses.

Kholooci (2007) found a significant inverse relationship between total scores on the FFMQ and CTQ. Kholooci proposed that these findings suggest that the more mindful the therapist, the less countertransference awareness he/she has. A multiple linear regression analysis

on how the 5 factors of mindfulness predicted levels of countertransference awareness as measured by the CTQ was conducted. This revealed that when taken together the three mindfulness factors of OBSERVING, ACTING WITH AWARENESS, and ACCEPTING WITHOUT JUDGEMENT significantly predict countertransference awareness levels (for the overall model: $R^2 = .11$, adjusted $R^2 = .09$, $F(5,193) = 4.67$, $p = .00$). When analyzing each of the five factors independently, ACTING WITH AWARENESS ($r = -.19$, $p < .01$) and ACCEPTING WITHOUT JUDGEMENT ($r = -.25$, $p < .01$) were significantly inversely correlated with countertransference awareness. Kholooci proposes that this implies that therapists' ability to behave in a nonjudgmental manner reflects their capacity to stay in the present moment and subsequently, lack self-criticism for encountering countertransference reactions.

Kholooci (2007) found that meditation practice did not affect mindfulness scores in that meditating therapists had similar mindfulness scores as therapists who did not meditate. However, the length of personal psychotherapy was found to be significantly positively correlated with mindfulness levels; but the length of personal psychotherapy was not significantly correlated with countertransference awareness (Kholooci, 2007).

Even though Kholooci (2007) shared her data as to how frequently therapists meditated per week, Kholooci did not collect how many years they had practiced meditation. This makes it difficult to know if therapists were beginners or had enough meditation experience to demonstrate measurable results of mindfulness. As previously mentioned, Lin et al. (2007) provides support that meditators with less than one year experience may not show quantifiable outcomes of their meditation practice. Furthermore, given that brain research shows that more meditation practice over time translates to trait mindfulness due to neuroplasticity, it would be

important to know how long the therapists had been practicing meditation in order to better explain Kholooci's findings.

Kholooci (2007) proposes that mindfulness could enhance therapists' ability to initially be consciously aware of internal and external countertransference reactions toward a client, but that these reactions may be quickly released by mindful therapists to the extent that they do not remain within mindful therapists' long enough to be analyzed, verbalized and measured on a scale like the CTQ. Thus, Kholooci explains the inverse relationship between mindfulness and countertransference reactions as being due to mindful therapists releasing their initial countertransference reactions as opposed to holding onto them.

As previously mentioned, Kholooci (2007) attempts to gather findings about countertransference awareness using a measure (CTQ) which was not designed or intended to directly measure countertransference awareness. Kholooci later explains in her dissertation that the CTQ is not an appropriate instrument for assessing countertransference awareness. In addition, since the CTQ measures all therapist reactions to clients as opposed to just therapist reactions due to unresolved conflicts or vulnerabilities, it is difficult to understand the extent Kholooci's findings relate to the current study. Kholooci's claim that perhaps more mindful therapists release their initial countertransference reactions making it difficult to be measured does not match the findings of brain research reviewed in this chapter.

In contrast, as previously mentioned, brain research supports that mindfulness developed by meditation enables people to become more aware of their internal emotional experience and less reactive to it. As such, it would seem that more mindful therapists would be more aware of such reactions and more likely to emotionally and behaviorally regulate their reactions. It would seem that more mindful therapists would be aware of their internal process of emotional

reactions rising and falling within them. In other words, even if Kholooci's claim were true that more mindful people would quickly release initial countertransference reactions, wouldn't more mindful people be aware of their own internal process of the coming and going of their emotional reactions more than non-mindful people?

Thus, the relationship between mindfulness and internal countertransference responses remains unclear. While previous research suggests that mindfulness and countertransference management should be correlated, mechanisms by which mindfulness may influence countertransference management are unknown. Differentiation of self may help explain the relationship between mindfulness and countertransference management. The five factors of countertransference management and the five facets of mindfulness could also be theorized to overlap with the relational construct of differentiation of self from Bowen family therapy.

Differentiation of Self

Conceptualization and Definition

According to Bowen theory, both the need for individuality and the need for togetherness are innate life forces that people negotiate within their family of origin (Kerr & Bowen, 1988). Differentiation of self refers to the extent to which people can balance intimacy and autonomy in relationships and maintain healthy emotional and intellectual functioning (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988). Bowen theorized that through the process of defining a self, differentiation occurs which is necessary for optimal mental health (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988).

Differentiation of self can be conceptualized as a developmental process, a multidimensional characteristic, and a way of being (Jenkins, Buboltz, Schwartz, & Johnson, 2005; Kerr & Bowen, 1988). Central to differentiation of self is Bowen's notion that people's

level of differentiation is related to unresolved emotional attachment to their family of origin (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988). Kerr (1984) claimed that “the degree to which a person functions as an undifferentiated self in their adult life reflects the degree to which they functioned as an undifferentiated self while growing-up in their family” (p.10).

Basic and Functional Differentiation.

Bowen theory proposes that people have both basic and functional levels of differentiation (Kerr, 1984; Kerr & Bowen, 1988). Basic differentiation reflects their overall level of differentiation and is theorized to be relatively fixed based on their unresolved attachment to their family of origin. Theoretically, basic differentiation does not fluctuate based on relationships or environmental factors (Gushue & Constantine, 2003; Kerr, 1984; Kerr & Bowen, 1988).

Functional differentiation refers to how people act in the present moment in particular relationships and is dependent on environmental circumstances (Gushue & Constantine, 2003; Kerr, 1984; Kerr & Bowen, 1988). A certain situation or relationship may elicit people to act with greater or lesser differentiation than their basic level of differentiation (Gushue & Constantine, 2003; Kerr & Bowen, 1988). Basic differentiation could be interpreted as dispositional differentiation and functional differentiation as state-like or situation-dependent in that it represents differentiation for any given relationship or situation.

The process of how to change differentiation of self has been theoretically examined and supported by research. Bowen theory suggests that people can begin to gradually increase their level of basic differentiation by changing their functional differentiation for a sustained amount of time (Griffin & Apostol, 1993). Kerr (1984) theorizes that people can increase their functional differentiation and subsequently their basic differentiation level if they consciously chooses to

examine their role and the emotional process in their family of origin (Kerr, 1984). Griffen and Apostol (1993) have provided empirical support that people can change their basic level of differentiation if their functional differentiation is increased over a period of time.

Theorized Benefits of Differentiation.

Bowen theorized that differentiation of self occurs within both intra-psychoic and interpersonal dimensions (Bowen, 1978; Kerr, 1984). Internally, people are differentiated when they can distinguish feelings from thoughts and can choose which of these parts of themselves to be guided by (Kerr, 1984; Kerr & Bowen, 1988; Skowron & Friedlander, 1998). Greater degrees of differentiation enable people to tolerate intense affect and anxiety and be able to shift between experiencing strong affect and cognitive reasoning (Kerr & Bowen, 1988; Skowron & Friedlander, 1998). Interpersonally, people's ability to regulate emotion in significant relationships is a gauge of their level of differentiation (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988; Skowron & Friedlander, 1998). The more differentiated people are, the more they are able to be an individual while in emotional contact with others (Kerr & Bowen, 1988).

Theoretically well differentiated people are psychologically autonomous and can think, feel, and act for themselves in significant relationships (Bowen, 1978; Kerr & Bowen, 1988). Well differentiated people behave with age-appropriate autonomy and take personal responsibility for developmentally-appropriate tasks (Bowen, 1978). More differentiated people are thought to be more comfortable with strong affect, better able to cope with ambiguity, and adjust well to varying circumstances (Bowen, 1978). Well differentiated people maintain flexibility in how they respond to a situation (Bowen, 1978; Kerr & Bowen, 1988). Kerr and Bowen (1988) theorize that people who are more differentiated have an ability to tolerate their own anxiety and do not easily absorb or become affected by others' anxiety.

Theoretically, less differentiated people have poorly defined selves, are not able to maintain their individuality in significant relationships and have little emotional separation from their family (Kerr & Bowen, 1988). Less differentiated people are emotionally enmeshed with their family of origin. This means that people think, feel, and act as though they are one with their family which is a reflection of what early Bowen theory called the undifferentiated ego mass (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988). Less differentiated people operate in anticipation to others' responses, expectations, and feedback and are highly reactive to their family and significant others (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988). Less differentiated people show less ability to adapt and are more vulnerable to exhibiting psychological symptoms under stress (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988). Because less differentiated people have less capacity to tolerate anxiety in significant relationships, they are likely to attempt to minimize their anxiety by either physically or emotionally cutting off from relationships or emotionally fusing with others (Bowen, 1978; Kerr, 1984; Kerr & Bowen, 1988; Skowron & Friedlander, 1998).

Criticism of Differentiation of Self Theory.

The bulk of criticisms have focused on Bowen theory rather than criticisms of research on differentiation of self. Bowen theory has been criticized for not accounting for the disparities of power and opportunity which create obstacles, penalties, and social and systemic barriers to differentiation for women and ethnic minorities (McGoldrick & Carter, 2001). This has raised the question of whether the notion of differentiation of self can be appropriately applied to women and ethnic minorities (McGoldrick & Carter, 2001). However, cross-cultural research discussed later in this paper provides evidence that differentiation of self can be applied to diverse populations.

Feminists have criticized Bowen theory for valuing the masculine quality of rationality over the female quality of emotional expressiveness (McGoldrick & Carter, 2001). However, Bowen theory views intellectualizing as a defense mechanism ruled by emotional reactivity (Kerr, 1984). Bowen likened differentiation to maturity in that people can communicate authentically and in an emotionally appropriate manner without living from their impulses, reactions, fears, and unresolved instincts (McGoldrick & Carter, 2001).

Furthermore, Bowen theory dictates that greater differentiation of self requires an increased capacity for emotional detachment or emotional neutrality while still remaining in contact in a relationship system (Kerr & Bowen, 1988). Emotional detachment or neutrality does not mean emotional aloofness or a denial of one's own emotional needs (Kerr, 1984; Kerr & Bowen, 1988). Emotional detachment or neutrality reflects a person's capacity to be calm and "to be aware of the influence of subjectivity on one's notions about what 'should' be" (Kerr & Bowen, 1988, p. 111). This can be likened to a form of emotional intelligence (McGoldrick & Carter, 2001).

Intrapersonally, emotional detachment or neutrality is described as though there is space between people's subjective feelings and thoughts and their reaction to others (Kerr & Bowen, 1988). The emotional regulation that occurs intrapersonally enables people to retain choice about the degree to which their relationships are governed by their intra-psychic emotional environment (Kerr, 1984). In turn, the greater level of differentiation allows people to be themselves in relationships with others and permits others the freedom to be themselves (Kerr, 1984). Conversely, the lower the differentiation the greater the emotional need is for others to think, feel, and behave in a certain manner (Kerr, 1984). Kerr (1984) posits that "the greater the

undifferentiation, the greater the tendency for a person to be either unable to function without an intense relationship or unable to function when in an intense relationship” (p.10).

Research on Differentiation of Self

Skowron and Friedlander (1998) operationalize the central components of differentiation of self as: 1) the amount of emotional reactivity, 2) fusion with others, 3) emotional cut off from others, and 4) use of “I positions”. Subsequently, the majority of research on differentiation of self has used Skowron and Friedlander’s operational definition of differentiation of self. While some components of Bowen theory such as the multigenerational transmission process has not received empirical support, differentiation of self is strongly supported by empirical evidence (Charles, 2001).

Research on differentiation of self has drastically increased in the past ten years. Research has found that differentiation of self in adults is correlated inversely with depression (Elieson & Rubin, 2001) and psychological distress (Chung & Gale, 2006; Kim-Appel, Appel, Newman, & Parr, 2007; Murdock & Gore, 2004; Peleg-Popko, 2002; Skowron & Dendy, 2004; Skowron & Friedlander, 1998; Skowron, Wester, & Azen, 2004; Tuason & Friedlander, 2000). Evidence supports that differentiation of self is positively correlated with psychological adjustment (Jenkins et al., 2005; Skowron, 2004; Skowron et al., 2004), marital satisfaction (Skowron, 2000; Skowron & Friedlander, 1998), and career-decision making (Larson & Wilson, 1998).

In this section, research on differentiation of self will be reviewed. Specifically, research on the relationships between differentiation of self and stress, anxiety, emotion regulation and identity development will be discussed. In addition, cross-cultural research and research on intimate relationships will be reviewed. While no research to date exists on the relationship

between differentiation of self and mindfulness, research suggesting a possible correlation between these two constructs will be discussed. Lastly, theory and research will be reviewed suggesting a possible correlation between differentiation of self and countertransference management.

Stress.

Research has established the relations between differentiation of self and stress. Skowron, Wester, and Azen (2004) found that differentiation of self mediates college-related stress and psychological symptoms in that greater levels of differentiation were negatively correlated to college-related stress and were positively associated with psychological adjustment. Murdock and Gore (2004) found that differentiation of self, perceived stress, and the interaction of perceived stress and differentiation predicted psychological distress. Research supports that when highly differentiated people and poorly differentiated people are both exposed to intense stress, poorly differentiated people report more psychological dysfunction than highly differentiated people (Murdock & Gore, 2004).

Anxiety.

In regards to anxiety, Skowron and Friedlander (1998) found differentiation inversely related to trait anxiety. This has been consistently supported by cross-cultural research. Differentiation of self and trait anxiety were found to be inversely correlated in a Filipino sample when holding other psychological symptoms constant (Tuason & Friedlander, 2000). In Israeli college students, differentiation of self has been found to be negatively correlated with social anxiety, in particular fear of negative evaluation (Peleg-Popko, 2002).

Cross-Cultural Research.

Despite initial criticisms of Bowen theory, research suggests that the construct of differentiation of self can be applied cross-culturally with an awareness of what comprises optimal differentiation of self (Chung & Gale, 2006; Gushue & Constantine, 2003; Tuason & Friedlander, 2000). Differentiation of self was positively correlated with mental health in samples that were primarily European American (Chung & Gale, 2006; Murdock & Gore, 2004; Skowron & Friedlander, 1998; Skowron, Holmes, & Sabatelli, 2003) and in collectivist-oriented cultures including Filipino samples (Tuason & Friedlander, 2000), and Korean samples (Chung & Gale, 2006). Greater differentiation has been found to predict better social problem-solving skills, better psychological adjustment, and ethnic group belonging among ethnic minority men and women (Skowron, 2004). Differentiation of self has also been found to be positively correlated with reports of self-perceived uniqueness in African American samples (Gushue & Constantine, 2003).

Emotion-Regulation and Identity Development.

Research has established the relatedness of differentiation of self with development and emotion regulation. Differentiation of self is empirically predictive of psychosocial development (Jenkins et al., 2005) and has been positively correlated with identity development (Johnson, Buboltz, & Seemann, 2003). Jenkins et al. found that participants who responded to stimuli in their environment with emotional lability, emotional flooding, and hypersensitivity were less confident and had less well defined identities. Differentiation as measured by peer intimacy, peer individuation, and intergenerational individuation predicted psychological reactivity (Johnson & Buboltz, 2000).

Skowron et al. (2003) suggested that self-regulation is specifically a key factor of the intra-personal dimension of differentiation of self. Skowron et al. found empirical support for the idea that self-regulation as measured by an ability to regulate emotional reactivity and maintain an I-position is a crucial component of differentiation of self and subsequent psychological well-being. Thus, research supports Bowen's notion that regulating emotional reactivity is part of the identity development process and that greater differentiation is associated with greater capacity to regulate emotions and a more defined identity (Jenkins et al., 2005; Johnson & Buboltz, 2000).

Differentiation of Self and Interpersonal Behavior.

In considering the relations among countertransference management, differentiation of self and mindfulness, it is relevant to consider how differentiation of self affects interpersonal behavior. Theory and research on differentiation of self in intimate relationships will be reviewed. Similarly to mindfulness, no research exists on the relationships between differentiation of self and the therapeutic relationship. Thus, implications about how differentiation of self may affect the therapeutic relationship will be made.

Theory suggests that a crucial component of the interpersonal dimension of differentiation of self is interdependent relating. Interdependent relating is the ability to be comfortable with togetherness and independence in close relationships and be able to freely relate to parents as peers in adulthood (Kerr, 1984; Skowron et al., 2003). Differentiation of self and interdependent relating were empirically found to be moderately related to one another ($r = .43$) (Skowron et al., 2003).

Research found that couples with greater differentiation of self scores as measured by the DSI reported greater levels of marital satisfaction (Skowron, 2000; Skowron & Friedlander,

1998). Conversely, couples with less differentiation experienced more marital distress (Skowron, 2000). These findings have also been supported in a study on lesbian couples (Spencer & Brown, 2007) and in a study among Israeli couples at varying stages of marriage (Peleg, 2008).

Differentiation of self has also been found to positively correlate with emotional intelligence and perceived intimacy (Gomes, 2005) and lower relationship violence (Skowron & Platt, 2005).

In considering the implications of research on the relationship between differentiation of self and relationship satisfaction in intimate relationships, it would seem that the above-mentioned findings would translate to the therapeutic relationship. Despite the lack of research to date on how therapists' differentiation of self impacts the therapeutic relationship, higher differentiation of self scores among therapists may correlate to therapists' mindfulness and may help facilitate therapists' countertransference management ability.

Differentiation of Self and Mindfulness.

There is currently no research to date that directly examines the relationship between differentiation of self and mindfulness. However, both differentiation of self and mindfulness are independently related to the same theoretical constructs. Based on the review of theory and research in this chapter, it is plausible that differentiation of self theoretically aligns with the five facets of mindfulness in that people who have the ability to differentiate themselves from their thoughts and feelings, and are not emotionally reactive, cut-off, or fused in their personal relationships hypothetically would be more mindful. That is, they should have the ability to describe their experience with words, be non-reactive toward their inner experience, act with awareness, observe their thoughts and feelings, and have a non-judgmental attitude towards their experience. To demonstrate the plausibility of a relationship between differentiation of self and mindfulness, common correlates between differentiation of self and mindfulness will be

reviewed including self-regulation, attachment security, effortful control, relationship satisfaction, and decreased reactivity.

Self-regulation.

In considering the theoretical link between differentiation of self and mindfulness, the common factor of self-regulation must be addressed. Self-regulation enables people to consciously control their attention, have cognitive flexibility, suppress negative emotions and reactive tendencies, and engage in adaptive behavior (Skowron & Dendy, 2004). Brain research suggests that self-regulation may share similar neural locations of the brain with effortful control and attachment security.

Differentiation of self has been found to positively correlate with self-regulation (Skowron & Dendy, 2004). More differentiated adults are theoretically able to experience, reflect and regulate their emotions and be comfortable with ambiguity (Skowron & Dendy, 2004). As previously mentioned, trait mindfulness has been shown to facilitate self-regulation (Masicampo & Baumeister, 2007; Siegel, 2007b) and is strongly correlated with emotion regulation, nonattachment, and reduced rumination (Coffey & Hartman, 2008). Since both differentiation of self and mindfulness correlate to self regulation, it is plausible that they would correlate to each other.

Attachment security.

Skowron and Dendy (2004) found that adults who are more differentiated and reported less attachment anxiety and avoidance were most able of reaching self-regulation (i.e. both attentional and behavioral control). Increased emotional reactivity, emotional cutoff, and fusion with others uniquely and significantly correlated to increased attachment anxiety. Skowron and

Dendy found that differentiation of self predicted 62% of the variability in attachment avoidance and 40% of the variance in attachment anxiety.

Outcome studies on mindfulness and on secure attachment have similar findings (Shaver et al., 2007; Siegel, 2007b) and both involve internal attunement and facilitate neural integration in the brain (Siegel, 2007b). Siegel among others has proposed that securely attached relationships including the therapeutic relationship between clinician and client and the relationships between parents and children facilitate fiber growth in the prefrontal region of the brain (see Siegel for review). As previously mentioned, mindfulness has also been shown to affect prefrontal functions in the same region of the brain. Thus, since differentiation of self inversely correlates with attachment anxiety and avoidance, and given that as research on mindfulness suggests a relationship with attachment security, it is plausible that these two constructs correlate with each other.

Effortful control.

There is empirical support that differentiation of self is a unique predictor of effortful control in that greater differentiation as measured by the DSI positively correlates with greater effortful control (Skowron & Dendy, 2004). Skowron and Dendy provide evidence that decreased emotional reactivity and increased ability in relationships to take an I-position uniquely positively correlate with increased effortful control. This makes sense given what we know about effortful control neurologically. According to Siegel (2007b), effortful control is a phrase that encompasses the executive functions of the brain including processing emotions, focused attention, attentional flexibility.

Brain research suggests that mindfulness facilitates effortful control (Siegel, 2007b). While Skowron and Dendy use effortful control interchangeably with self-regulation, perhaps

differentiation of self and mindfulness influence similar correlates in the brain. Even though the current study will not include a neurological measure, it is plausible that since differentiation of self and mindfulness both independently correlate with increased effortful control, they are also likely correlated.

Relationship satisfaction.

Both differentiation of self and mindfulness are independently correlated with relationship satisfaction. As previously mentioned, trait mindfulness predicts relationship satisfaction (Barnes et al., 2007; Wachs & Cordova, 2007). Similarly, evidence supports that differentiation of self predicts marital satisfaction (Skowron & Friedlander, 1998). Differentiation of self has been found to account for 74% of variance in husbands' marital adjustment and 61% of variance in wife's marital adjustment (Skowron, 2000). Thus, since both differentiation of self and mindfulness are independently correlated with relationship satisfaction, it is plausible that they are correlated.

Decreased reactivity.

Decreased reactivity has empirically been shown to be a component of differentiation of self on the DSI (Skowron & Friedlander, 1998) and has empirically been shown to be a facet of mindfulness on the FFMQ (Baer et al., 2006). Because decreased reactivity is a component of both operational definitions for differentiation of self (i.e. less emotional reactivity) and mindfulness (i.e. non-reactive toward his/her inner experience) and since both the DSI and FFMQ will be used in the current study, it is relevant to consider how non-reactivity is theoretically grounded in both constructs. Theoretically, both differentiation of self and mindfulness point to a process of intra-psychic change that occurs as a result of becoming more differentiated and/or more mindful, which lends itself to decreased reactivity.

Theory suggests that a de-coupling process occurs when one is mindful in which there is a mental gap between registering internal and external stimuli and responding to stimuli with internal evaluation and subsequent behavior (Brown et al., 2007b). This has been supported by brain research on mindfulness. As previously mentioned, mindfulness meditation practice enables people to become more non-reactive by changing neural functioning which involves both internal emotion regulation and response flexibility (Davidson, 2000; Siegel, 2007a, 2007b). Behaviorally, this enables one to pause and consider one's options before responding (Siegel, 2007a, 2007b).

Similarly, theoretically differentiation of self requires an ability to regulate emotions which results in decreased emotional reactivity (Kerr, 1984; Kerr & Bowen, 1988). Kerr (1984) theorizes that as people becomes more differentiated two emotional changes occur: 1) an increased ability to distinguish between behavior that is based on emotional processes and behavior based on thinking processes and 2) an increased ability to distinguish between subjectivity (i.e., one's perception of the world) and objectivity (i.e., how the world really is). Kerr describes the change that occurs that could contribute to decreased emotional reactivity as a parallel process of deprogramming one's emotional reactivity and developing a new way of thinking about one's own emotional process and how it is enacted in the environment.

As previously mentioned, basic differentiation could be interpreted as dispositional or trait-like whereas functional differentiation could be seen as state-like or situation dependent. As previously mentioned, Griffen and Apostal (1993) provide empirical support that by increasing their functional differentiation, people can change their basic level of differentiation. Theoretically, this is similar to the process of how state mindfulness can influence trait mindfulness. As previously mentioned, brain research on neuroplasticity has shown that by

increasing the frequency of state mindfulness, meditators' mindfulness states turn into trait mindfulness over time.

Given that decreased reactivity is a facet of both constructs, differentiation of self and mindfulness may be correlated. Furthermore, the similarity in reported internal processes of change in both constructs suggest a possible correlation. In addition, since research previously mentioned in this chapter has shown that both mindfulness and differentiation of self independently correlate with self-regulation, effortful control, relationship satisfaction, decreased reactivity, decreased anxiety, and increased relationship satisfaction, it would be plausible that mindfulness and differentiation of self positively correlate.

While there is no research on mindfulness meditation and differentiation of self, one study has examined the effect of an awareness practice on emotional reactivity as measured by the DSI (Fehrer, 2002). Participants were taught the Awareness Response in classes that met for two hours per week over the course of six weeks. The Awareness Response included 1) body awareness to instill observation of one's emotional reactivity, 2) what Fehrer calls a "pause and breathe" practice which teaches to breathe and wait before reacting to a trigger, and 3) an informal mindfulness meditation practice to increase present moment awareness. While quantitative measures showed no significant changes in emotional reactivity, anger, or anxiety compared to a control group, qualitative results showed otherwise. Treatment participants and their partners or friends revealed in qualitative questionnaires that the intervention decreased emotional reactivity and increased inner peace and pro-social interpersonal behavior. This suggests a potential relationship between decreased emotional reactivity and mindfulness practices. While Fehrer's findings are promising, more research is needed to support that differentiation of self as measured by the total score of the DSI (i.e., not just the emotional

reactivity subscale of the DSI) is correlated with mindfulness and mindfulness meditation practice.

Differentiation of Self and Countertransference Management.

There has been no research to date examining the relationship between differentiation of self and countertransference management. To demonstrate the plausibility of a relationship between differentiation of self and countertransference management, the relationship of each to anxiety will be reviewed. In addition, implications will be made as to the theoretical connections between differentiation of self and countertransference management.

Anxiety.

As previously mentioned, anxiety was independently found to be inversely correlated with differentiation of self (Peleg-Popko, 2002; Skowron & Friedlander, 1998; Tuason & Friedlander, 2000). As previously discussed, anxiety is one of the most common emotional countertransference responses (Fauth & Hayes, 2006; Gelso et al., 1995; Hayes & Gelso, 1991; Hayes & Gelso, 1993; Hayes et al., 1998; Latts & Gelso, 1995; Yulis & Kiesler, 1968) and anxiety management has been shown to be a factor of countertransference management (Van Wagoner et al., 1991). Given that differentiation of self and countertransference management each independently correlate to decreased anxiety, it would seem plausible that these two constructs correlate.

Theoretical Connections with Countertransference Management.

As previously mentioned, Hayes et al. (1998) found empirical evidence that common sources of unresolved issues for therapists include therapists' family of origin issues. Theory might suggest that if one cannot differentiate one's family of origin issues, from one's sense of identity, and from clients' issues, then one will have difficulty effectively managing

countertransference. Theoretically, one's use of I positions and low emotional reactivity could correlate with the countertransference management skills of anxiety management, conceptualization ability, and ability for self-integration, among others. Given that self-integration refers to the ability to differentiate oneself from others, it is hypothesized that the greater level of differentiation, the greater degree to which therapists are able to manage countertransference based on the five factor model empirically supported by Van Wagoner et al. (1991). The author does not suggest that each specific factor of differentiation of self directly maps to a given specific factor of the countertransference management construct. Rather, the author speculates there is a theoretical association between the four factors of differentiation of self and the five factors of the countertransference management construct.

Rationale

Mindfulness has been shown to mediate the relationship between formal meditation practice and increased psychological functioning (Carmody & Baer, 2008). Thus, there is evidence that meditation practice helps develop mindfulness which subsequently helps increase psychological functioning (Carmody & Baer, 2008). Brain research reviewed in this chapter shows how mindfulness meditation practice increases mindfulness over time (Siegel, 2007b).

To date, there is no research on mindfulness and countertransference management. Research on mindfulness and countertransference is inconclusive. Empirical evidence has shown that higher levels of mindfulness marginally predicted more support and less withdrawal (Barnes et al., 2007) and that mindfulness enables one to have more equanimity rather than pulling away from negative affect (Siegel, 2007b). Since mindfulness meditation enhances the circuits in the brain involved in neural integration, internal attunement, response flexibility, empathy, insight, and decreased reactivity (Siegel, 2007b), then it would make sense that therapists who practice

mindfulness meditation would have greater mindfulness, and would have greater countertransference management skills.

Furthermore, as research previously discussed in this chapter suggests, therapists who have greater mindfulness would also potentially have higher differentiation of self scores. This is plausible since both mindfulness and differentiation of self have similar correlates including self-regulation, effortful control, relationship satisfaction, and decreased reactivity, decreased anxiety, and increased relationship satisfaction.

In addition, it would be plausible that differentiation of self and countertransference management would correlate given that both constructs independently inversely correlate with anxiety. Theory might suggest that if one can differentiate one's family of origin issues from one's sense of identity, and from clients' issues, then one will have the ability to effectively manage countertransference related to family of origin issues.

Hypotheses

The purpose of this study is to examine the relations among meditation practice experience, mindfulness, differentiation of self, and countertransference management. I hypothesize that therapists' mindfulness and differentiation of self both predict therapists' ability to manage countertransference. In addition, I hypothesize that meditation practice experience predicts mindfulness and mindfulness in turn predicts differentiation of self. Specifically, I hypothesize the following relationships among these four variables (See Figure 1):

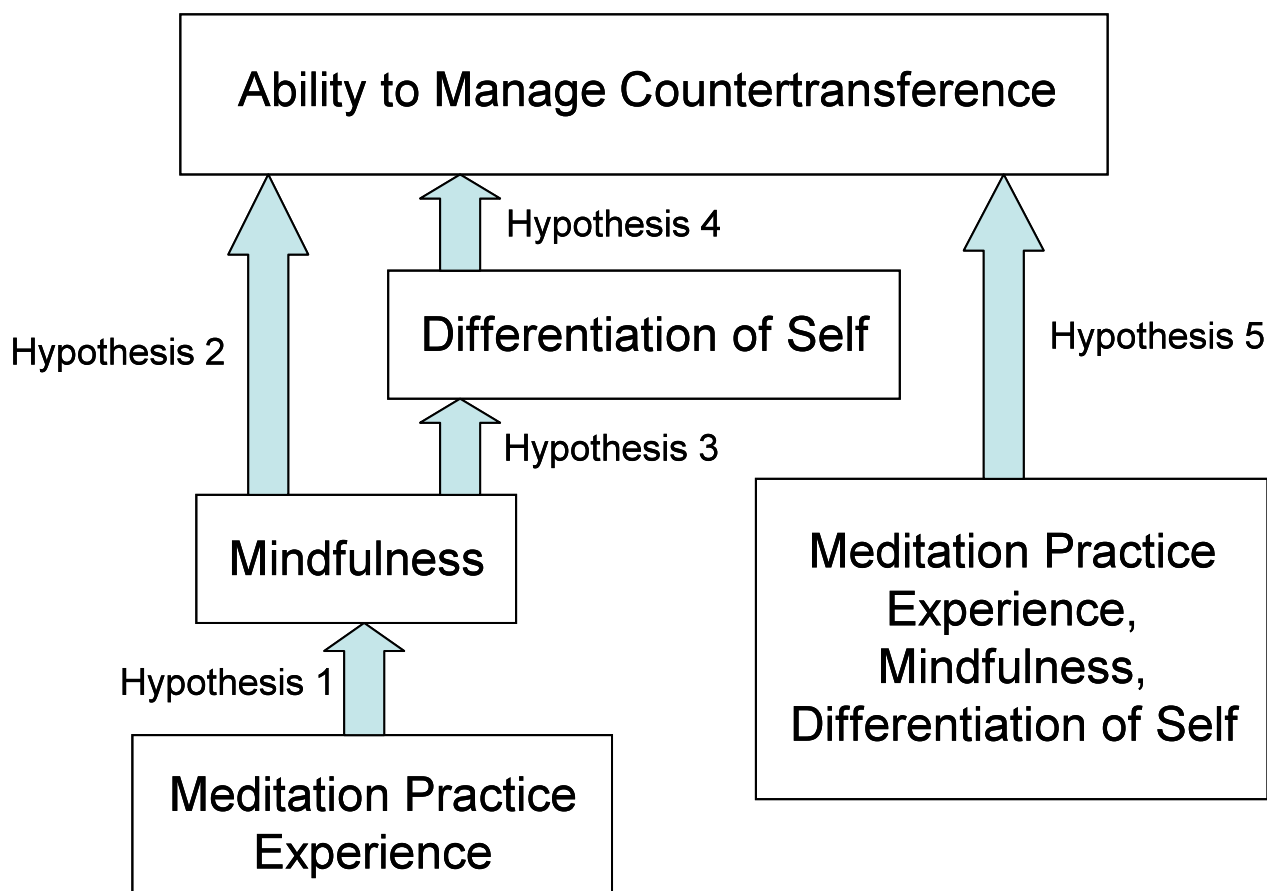


Figure 1. *Hypotheses.*

Hypothesis 1: Meditation practice experience predicts levels of mindfulness in that as experience of meditation practice increases, therapists' mindfulness increases. Thus, meditation practice experience will have a positive relationship with therapists' mindfulness.

Hypothesis 2: Levels of mindfulness predict the ability to manage countertransference in that as mindfulness increases, therapists' ability to manage countertransference increases. Thus, mindfulness will have a positive relationship with countertransference management.

Hypothesis 3: Levels of mindfulness will predict levels of differentiation of self, such that as mindfulness increases, differentiation of self increases. Thus, mindfulness will have a positive relationship with differentiation of self.

Hypothesis 4: Levels of differentiation of self predict the ability to manage countertransference in that as differentiation of self increases, therapists' ability to manage countertransference increases. Thus, countertransference management will have a positive relationship with differentiation of self.

Hypothesis 5: Meditation experience, mindfulness, and differentiation of self when combined will account for a significant amount of variance of countertransference management.

Chapter III

Method

Participants

An *a priori* power analysis (Faul, Erdfelder, Lang, & Buchner, 2007) was conducted for a multiple regression with 4 predictor variables, a fixed alpha of .05, and a fixed power of .80. To detect a small effect size of .2 (Cohen, 1988), 65 dyads would be needed. A medium effect size of .5 (Cohen, 1988) would necessitate 30 total dyads. A large effect size of .8 (Cohen, 1988) would require 21 dyads. In this study, an effect size of .2 was used because of the likelihood of small effects. The actual numbers of participants for this study were 100 supervisees and 78 supervisors, which comprised 78 unique supervisor-supervisee dyads.

Supervisees.

Supervisees were composed of 68 therapist trainees identifying as female, 30 identifying as male, and 2 identifying as transgendered. In terms of ethnicity, 4 identified as African-American, 5 as Asian-American, 81 as European-American/Caucasian, 3 as Hispanic-American, 1 as Middle-Eastern American, 1 identified as Indian, 1 identified as Caucasian/Iranian, and 1 identified as Asian/Caucasian, and 3 as bi-ethnic/multi-ethnic. In terms of sexual orientation, 88 identified as heterosexual, 7 identified as bisexual, and 5 identified as gay/lesbian (See Table 1).

Table 1.

Supervisees' Demographics

Female	68
Male	30
Transgendered	2
African-American	4
Asian-American	5
European-American/ Caucasian	81
Hispanic-American	3
Middle-Eastern American	1
Indian	1
Caucasian/Iranian	1
Asian/Caucasian	1
Bi-ethnic/multi-ethnic	3
Bi-sexual	7
Gay/Lesbian	5
Heterosexual	88

In terms of the spiritual or religious traditions that supervisees predominately identify with and/or practice, 16 identified as agnostic, 6 as atheist, 10 as Buddhist, 12 as Christian/Catholic, 2 as Christian/LDS, 23 as Christian/Protestant, 4 as Jewish, 1 as Hindu, 1 as Muslim, 1 as Taoist, 1 as Wiccan/Pagan, and 23 as Other (i.e. none of the previous options) (See Table 2). In terms of what spiritual or religious tradition supervisees were predominately raised, 7 identified being raised as agnostic, 1 as atheist, 30 as Christian/Catholic, 1 as Christian/LDS, 42 as Christian/Protestant, 6 as Jewish, 3 as Hindu, 2 as Muslim, and 8 as Other (i.e. none of the previous options) (See Table 2).

Table 2

Supervisees' Spirituality/Religion (N =100)

Variables	N of Current Spirituality/Religion ¹	N of Spirituality/Religion Predominantly Raised ²
Agnostic	16	7
Atheist	6	1
Buddhist	10	0
Christian/ Catholic	12	30
Christian/LDS	2	1
Christian/ Protestant	23	42
Jewish	4	6
Hindu	1	3
Muslim	1	2
Taoist	1	0
Wiccan/Pagan	1	0
Other	23	8

Note: ¹Spiritual or Religion That Supervisees Predominately Identify with and/or Practice. ²Spiritual or Religion That Supervisees Were Predominately Raised

The supervisee sample reported the following current education levels (See Table 3): 28 in a Ph.D. Counseling Psychology program, 17 in a Masters of Arts in Counselor Education program, 6 in a Ph.D. in Clinical Psychology program, 5 were post-graduation from a Ph.D. in

Counseling Psychology, 5 in a Masters of Arts in Counseling Psychology program, 5 in a Masters of Arts in Secondary School Counseling program, 4 in a Masters of Arts in Elementary School Counseling program, 3 in a Masters of Arts in Rehabilitation Counseling, 3 were post-graduation in a Masters of Arts in Counseling Psychology program, 2 in a Psy.D. in Clinical Psychology program, 2 in a Masters in Psychology and Counseling program, 2 were post-graduation from Master of Arts in Integral Counseling Psychology program, 2 in a Masters of Arts in School Counseling program, 2 post-graduation in a Masters of Arts in Transpersonal Counseling Psychology program, 2 post-graduation in a Masters of Arts in Marriage and Family Therapy program, 1 in a Ph.D. in Child Clinical Psychology program, 1 in a Masters of Arts in Secondary School Counseling program who also held a D.Ed. in Higher Education, 1 in a Masters of Arts in Counseling in Higher Education program, 1 in a Masters of Arts in Counseling Psychology program specializing in wilderness therapy, 1 in a Masters of Arts in Contemplative Psychotherapy program, 1 in a Masters of Arts in Transpersonal Counseling Psychology program, 1 in a Masters of Arts in Transpersonal Counseling Psychology program specializing in Art Therapy, 1 post-graduation from a Masters of Arts in Transpersonal Counseling Psychology program specializing in Art Therapy, 1 post-graduation in Masters of Arts in Social Work, 1 post-graduation in Counseling Ministries, 1 was a licensed Marriage and Family therapist, and 1 was post-graduation (without identifying education level).

Table 3

Supervisees' Current Education Programs

Ph.D. in Counseling Psychology	28
Masters of Arts in Counselor Education	17
Ph.D. in Clinical Psychology	6
Post-graduation from Ph.D. in Counseling Psychology	5
Masters of Arts in Counseling Psychology	5
Masters of Arts in Secondary School Counseling	5
Masters of Arts in Elementary School Counseling	4
Masters of Arts in Rehabilitation Counseling	3
Post-graduation from a Masters of Arts in Counseling Psychology	3
Psy.D. in Clinical Psychology	2
Masters in Psychology and Counseling	2
Post-graduation from Masters of Arts in Integral Counseling	2
Masters of Arts in School Counseling	2
Post-graduation from Masters of Arts in Transpersonal Counseling Psychology	2
Post-graduation from Masters of Arts in Marriage and Family Therapy	2
Ph.D. in Child Clinical Psychology program	1
Masters of Arts in Secondary School Counseling who also held D.Ed. in Higher Education	1
Masters of Arts in Counseling in Higher Education	1
Masters of Arts in Counseling Psychology, Specializing in Wilderness Therapy	1
Masters of Arts in Contemplative Psychotherapy	1
Masters of Arts in Transpersonal Counseling Psychology	1
Masters of Arts in Transpersonal Counseling Psychology, Specializing in Art Therapy	1
Post-graduation from Masters of Arts in Transpersonal Counseling Psychology,	1

Specializing in Art Therapy	
Post-graduation in Masters of Arts in Social Work	1
Post-graduation in Counseling Ministries	1
Licensed Marriage and Family therapist	1
Post-graduation (without identifying education level)	1

Of the 100 supervisees, 85 were seeing clients in the following training contexts (See Table 4): 45 in practicum, 3 in externships, 26 in internships for Masters program, 8 in pre-doctoral internships, and 3 in post-docs. Of the sample, 20 people identified that they were earning hours for licensure, 2 people reported taking a break from earning hours for licensure, 2 people identified that they see clients as part of a graduate assistantship, 1 person said he/she was earning licensing hours in a private practice setting, 1 person said that he/she sees clients as mental health case work manager, and 1 person said that he/she sees clients as a licensed marriage and family therapist.

Table 4

Contexts that Supervisees Provided Psychotherapy

Practicum	45
Externship	3
Internship for Masters program	26
Pre-Doctoral Internship	8
Graduate Assistantship	2
Post-doc	3
Earning Licensure Hours	20
Taking a Break from Earning Licensure Hours	2
Earning Licensure Hours in Private Practice	1
Mental Health Case Worker	1
Licensed Marriage & Family Therapist	1

All 100 supervisees reported the type of settings in which they were seeing clients for psychotherapy (See Table 5). Eighty-three participants reported that they saw clients in only one setting: 43 in a university counseling center, 24 in a school setting, 10 in an outpatient clinic/community mental health center, 3 in private practice, 2 in an office of vocational rehabilitation, and 1 in an outpatient chemical dependency clinic. Fifteen participants reported that they saw psychotherapy clients in two settings: 3 in a university counseling center and outpatient clinic/community mental health center, 3 in an outpatient clinic/community mental health center and private practice, 2 in a university counseling center and university career center, 1 in a university counseling center and outpatient hospital, 1 in a university counseling center and office of disability support services, 1 in an outpatient clinic/community mental health center and general in-patient hospital which serves patients for physical illness and psychiatric care, 1 in a outpatient clinic/community mental health center and a forensic setting, 1 in an outpatient clinic/community mental health center and after school program attached to a clinic, 1 in an outpatient clinic/community mental health center and school setting, and 1 in an outpatient clinic/community mental health center and private practice internship setting. One participant reported seeing clients at 3 settings including an outpatient clinic/community mental health center, school and community homes. One participant reported that he/she saw clients in 4 settings including an outpatient clinic/community mental health center, an in-patient psychiatric hospital, a private practice, and a residential treatment center.

Table 5

Clinical Settings that Supervisees Provided Psychotherapy

Provided Therapy in 1 Setting (N=83)	N
University Counseling Center	43
School Setting	24
Outpatient Clinic/Community Mental Health	10
Private Practice	3
Office of Vocational Rehabilitations	2
Outpatient Chemical Dependency Clinic	1
Provided Therapy in 2 Settings (N=15)	
University Counseling Center + Outpatient Clinic/Community Mental Health	3
Outpatient Clinic/Community Mental Health + Private Practice	3
University Counseling Center + University Career Center	2
University Counseling Center + Office of Disability Support Services	1
University Counseling Center + Outpatient Hospital	1
Outpatient Clinic/Community Mental Health + General In-Patient Hospital	1
Outpatient Clinic/Community Mental Health + Forensic Settings	1
Outpatient Clinic/Community Mental Health + After School Program Clinic	1
Outpatient Clinic/Community Mental Health + School Setting	1
Outpatient Clinic/Community Mental Health + Private Practice Internship	1
Provided Therapy in 3 Settings (N=1)	
Outpatient Clinic/Community Mental Health + School + Community Homes	1
Provided Therapy in 4 Settings (N=1)	
Outpatient Clinic/Community Mental Health + In-Patient Psychiatric Hospital + Private Practice + Residential Treatment Center	1

Supervisees varied in terms of how long they had seen psychotherapy clients, with experience ranging from one month to 16 years ($M = 2.53$ years, $SD = 2.61$, $N = 100$). Supervisees also differed in terms of how many hours per week they set aside for conducting individual psychotherapy, with time ranging from 2 hours per week to 28 hours per week ($M = 8.90$ hours, $SD = 6.06$, $N = 100$).

Of the 100 supervisees, 73 reported that they were currently in or had previously been in psychotherapy/counseling, and 27 reported that they had never been in psychotherapy/counseling. Time in psychotherapy across all supervisees ranged from 0 to 21 years in psychotherapy ($M = 2.67$ years, $SD = 4.21$, $N = 100$). Seventy-two of the seventy-three supervisees completed how long they have been in counseling as a client and, among these 72 supervisees, time in psychotherapy varied from attending one session to 21 years of counseling ($M = 3.85$, $SD = 4.52$, $N = 72$).

Out of the 100 supervisees in the study, 53 supervisees reported no mindfulness meditation experience and 47 supervisees reported that they had practiced mindfulness meditation either currently or in the past. Mindfulness meditation experience across all participants ranged from no experience to 40 years of practice. (Data from the 4 supervisees who reported that they practiced mindfulness meditation less than a year were rounded up to one year of practice for subsequent analyses). Among the 47 supervisees that reported having practiced mindfulness meditation, these 47 supervisees varied in mindfulness practice from 1 year to 40 years of practice ($M = 7.83$, $SD = 10.20$, $N = 47$). Total time per week of mindfulness meditation across all participants varied from no practice time per week to 630 minutes (i.e., 10.5 hours per week) ($M = 43.31$ minutes, $SD = 96.24$, $N = 93$). Total time per week of mindfulness meditation was completed by 39 supervisees and among these 39 supervisees total weekly

practice time ranged from 2 minutes to 630 minutes (i.e. 10.5 hours per week) ($M = 103.28$, $SD = 126.77$, $N = 39$). Frequency of mindfulness meditation practice across all participants ranged from no practice to 12 times per week ($M = 1.66$, $SD = 2.66$, $N = 95$). The 41 supervisees who completed their frequency of practice ranged from once a month to 12 times a week ($M = 3.85$, $SD = 2.83$, $N = 41$).

In terms of other spiritual practices or meditation traditions supervisees reported regularly engaging in, 56 reported engaging in spiritual practices other than mindfulness meditation and 44 reported not practicing other spiritual practices. Qualitative data were collected on the types of other spiritual practices of supervisees (See Table 6). The 56 supervisees who reported practicing other spiritual practices reported the following practices: 5 reported practicing yoga, 16 reported prayer which included Christian or Catholic prayer, Centering Prayer, Hindu prayer, Muslim prayer, 2 reported prayer in addition to reading scripture and attending church services or mass, 1 reported running, 2 reported reflection, 1 reported journal writing, 1 reported playing music, 1 reported being in nature, 1 reported practicing Paganism and martial arts, and 10 reported practicing other meditation traditions including 2 practicing Transcendental Meditation, 1 practicing Shamanism, 1 practicing the Diamond Approach, 1 practicing mindfulness in action, 1 practicing Green Tara Puja, 1 practicing Tonglen meditation, and 1 practicing Metta meditation, and 2 practicing Hatha yoga with chanting and meditation. Total time per week of other spiritual practices across all participants varied from 0 minutes to 630 minutes per week (i.e., 10.5 hours per week) ($M = 34.37$ minutes, $SD = 86.92$, $N=100$). Among the 24 supervisees who practiced other spiritual practices, their time per week varied from 8 minutes to 630 minutes (i.e. 10.5 hours per week) ($M = 141.79$, $SD = 127.65$, $N = 24$). Other spiritual practices were reported by 25 of the supervisees, and of these supervisees, frequency of this practice varied from 1 to 100

times per week ($M = 9.48$, $SD = 19.32$, $N = 25$). Across all supervisees, frequency of spiritual practice ranged from 0 to 100 times per week ($M = 2.39$, $SD = 10.42$, $N = 100$).

Table 6

Other Spiritual Practices/Meditation Traditions of Supervisees (N = 56)

Prayer (Christian, Catholic, Hindu & Muslim)	16
Yoga	5
Prayer + Reading Scripture + Attending Church or Mass	2
Running	1
Reflection	2
Journal Writing	1
Playing Music	1
Being in Nature	1
Paganism + Martial Arts	1
Transcendental Meditation	2
Shamanism	1
Diamond Approach	1
Mindfulness In Action	1
Green Tara Puja	1
Tonglen Meditation	1
Metta Meditation	1
Hatha Yoga + Chanting + Meditation	2

Out of the 100 supervisees in the study, 50 supervisees reported that they regularly practiced relaxation techniques or exercise for the purpose of relaxation and 50 reported that they did not. Qualitative data were collected for the type of relaxation practiced (See Table 7). Forty-nine supervisees described the type of relaxation practiced, which included the following: 24 supervisees reported some form of regular exercise such as yoga, running, swimming, biking, dancing, weight-lifting, and rock-climbing, 4 reported practicing a body scan technique, 12 reported practicing breathing exercises, 1 reported practicing diaphragmatic breathing, 2 reported practicing guided imagery, 1 reported practicing Mindfulness Based Stress Reduction, 3 reported practicing progressive muscle relaxation, 1 reported practicing Tai Chi Chuan, 1 reported

practicing Pranayama breathing, and 1 reported playing guitar. Among the entire supervisee sample, total time per week of relaxation practice ranged from no practice to 915 minutes per week (i.e., 15.25 hours per week) ($M = 75.55$ minutes per week (i.e. 1 hours, 15.55 minutes per week), $SD = 143.10$, $N = 100$). Among the supervisee sample that practiced relaxation, total time per week of relaxation practice ranged from 10 minutes of practice to 915 minutes per week (i.e., 15.25 hours per week) ($M = 175.70$ minutes (i.e. 2 hours, 93 minutes per week), $SD = 173.94$, $N = 43$). Among the entire sample, frequency of relaxation practice varied from no practice to 19 times per week ($M = 2.03$, $SD = 3.22$, $N = 100$). Among the 46 supervisees who reported frequency of relaxation practice, these supervisees varied from 1 to 19 times per week ($M = 4.40$, $SD = 3.48$, $N = 46$).

Table 7

Supervisees' Relaxation Practices (N = 49)

Regularly Exercise (yoga, running, swimming, biking, dancing, weight-lifting & rock-climbing)	24
Body Scan Technique	4
Breathing Exercise	12
Diaphragmic Breathing	1
Guided Imagery	2
Mindfulness-Based Stress Reduction	1
Progressive Muscle Relaxation	3
Tai Chi Chuan	1
Pranayama Breathing	1
Playing Guitar	1

Note: 50 Supervisees reported that they regularly practiced relaxation techniques or exercise for the purpose of relaxation. Of the 50, 49 supervisees provided qualitative data of the type of relaxation they practiced.

Supervisors.

The sample of 78 supervisors was composed of 53 (67.9%) who identified as female and 25 (32%) who identified as male. In terms of ethnicity, 3 (3.8%) identified as African-American, 1 (1.3%) as Asian-American, 61 (78.2%) as European-American/Caucasian, 5 (6.4%) as Hispanic-American, 1 (1.3%) as Native-American, 1 (1.3%) as Middle-Eastern, 1 (1.3%) as Asian, 1 (1.3%) as Mexican-American, 1 (1.3%) as European-American and Native American, 1 (1.3%) as Latina and German-Jewish and 1 (1.3%) as bi-ethnic/multi-ethnic. In terms of sexual orientation, 65 (83.3%) identified as heterosexual, 3 (3.8%) identified as bisexual, 6 (7.7%) identified as gay/lesbian, 1 (1.3%) identified as ardhnari, and 1 (1.3%) preferred not to respond (See Table 8).

Table 8

Supervisors' Demographics

Female	53
Male	25
African-American	3
Asian-American	1
European-American/ Caucasian	61
Hispanic-American	5
Middle-Eastern American	1
Native-American	1
Asian	1
Mexican-American	1
European-American & Native American	1
Latina & German-Jewish	1
Bi-ethnic/Multi-ethnic	1
Bi-sexual	3
Gay/Lesbian	6
Heterosexual	65
Ardhanari	1
Preferred not to Respond	1

In terms of what spiritual or religious tradition supervisors predominately identify with and/or practice, 18 (23.1%) identify as agnostic, 6 (7.7%) as atheist, 9 (11.5%) as Buddhist, 10 (12.8%) as Christian/Catholic, 1 (1.3%) as Christian/LDS, 17 (21.8%) as Christian/Protestant, 3 (3.8%) as Jewish, 1 (1.3%) as Hindu, 1 (1.3%) as Muslim, and 12 (15.4%) as Other (i.e. not one of the previous options) (See Table 9). In terms of what spiritual or religious tradition supervisors were predominately raised, 1 (1.3%) identified as being raised agnostic, 1 (1.3%) as Buddhist, 29 (37.2%) as Christian/Catholic, 2 (2.6%) as Christian/LDS, 27 (34.6%) as Christian/Protestant, 10 (12.8%) as Jewish, 1 (1.3%) as Hindu, 1 (1.3%) as Muslim, 1 (1.3%) as Wiccan/Pagan, and 5 (6.4%) as Other (i.e. not one of the previous options) (See Table 9).

Table 9

Supervisors' Spirituality/Religion (N = 78)

Variables	N of Current Spirituality/Religion ¹	N of Spirituality/Religion Predominantly Raised ²
Agnostic	18	1
Atheist	6	0
Buddhist	9	1
Christian/ Catholic	10	29
Christian/LDS	1	2
Christian/ Protestant	17	27
Jewish	3	10
Hindu	1	1
Muslim	1	1
Wiccan/Pagan	0	1
Other	12	5

Note: ¹Spiritual or Religion That Supervisors Predominately Identify with and/or Practice. ² Spiritual or Religion That Supervisors Were Predominately Raised

Out of the 78 supervisors, 31 (39.7%) reported having no license and 47 reported having a license, which included the following credentials (See Table 10): 4 (5.1%) certified addiction counselors, 1 (1.3%) certified rehabilitation counselor, 3 (3.8%) certified school counselor, 2 (2.6%) licensed clinical psychologist, 5 (6.4%) licensed in clinical social work, 1 (1.3%) licensed

creative arts therapist, 3 (3.8%) licensed professional counselor, 23 (29.5%) licensed psychologists, 1 (1.3%) licensed mental health counselor, 1 (1.3%) licensed master social worker, 2 (2.6%) licensed marriage and family therapist, 1 (1.3%) person was a licensed professional counselor and a licensed marriage and family therapist, 1 (1.3%) person was a licensed professional counselor and a registered art therapist, and 1 (1.3%) was a licensed professional counselor and a licensed psychologist. Of the 31 supervisors without a license, 21 supervisors responded as to which license their own supervisor held, which included the following: 2 responded with not applicable, 9 reported being supervised in their supervision of a trainee by a licensed professional counselor and 10 reported being supervised in their supervision of a trainee by a licensed psychologist. Seventy-three (93.6%) of the supervisors in this study were current supervisors of supervisees. Five (6.4%) supervisors were former, but recent, supervisors of supervisees due to five supervisees having requested to contact their supervisors from the previous semester, rather than their current supervisor, to participate in the study.

Table 10

Supervisors' Credentials (N = 47)

Certified Addiction Counselors	4
Certified Rehabilitation Counselor	1
Certified School Counselor	1
Licensed Clinical Psychologist	2
Licensed in Clinical Social Work	1
Licensed Creative Arts Therapy	1
Licensed Professional Counselor	3
Licensed Psychologist	23
Licensed Mental Health Counselor	1
Licensed Social Worker	1
Licensed Marriage and Family Therapist	2
Licensed Professional Counselor and a Registered Art Therapist	1
Licensed Professional Counselor and a Licensed Psychologist	1

Note: 31 Supervisors reported having no license, but working under someone else's license.

The range of how long supervisors have conducted individual psychotherapy, excluding training, ranged from 1 year to 43 years ($M = 10.92$, $SD = 13.38$, $N = 78$). The time supervisors set aside to conduct individual therapy ranged from none at all to 35 hours per week ($M = 11.06$, $SD = 9.34$, $N = 78$). The length of time supervisors have been providing supervision ranged from less than 1 year to 43 years ($M = 12.14$, $SD = 21.48$, $N = 76$). Time supervisors set aside for supervision ranged from 1 hour per week to 20 hours per week ($M = 4.93$, $SD = 4.98$, $N = 78$).

Seventy-five (96.2%) of the supervisors reported that they provided individual supervision, 25 (32.1%) of the supervisors provided group supervision, 1 (1.3%) supervisor reported providing supervision in a classroom setting, and 1 (1.3%) supervisor reported providing supervision in family therapy.

In terms of supervisor's experience as clients in psychotherapy, 67 (85.9%) reported that they were currently or previously had been in psychotherapy/counseling as a client and 11 (14.1%) reported that they have never been in psychotherapy as a client. Supervisors' length of time in psychotherapy ranged from none to 20 years ($M = 2.83$, $SD = 3.84$, $N = 78$). Among the 67 that reported having been in psychotherapy as a client, 65 supervisors provided data on how many years they have been in psychotherapy as a client, which varied from two months to 20 years ($M = 3.40$, $SD = 3.97$, $N = 65$).

In terms of supervisors' practice of mindfulness meditation, 41 (52.6%) supervisors reported that they practiced mindfulness meditation either currently or in the past, and 37 (47.4%) supervisors reported they had not. Thirty-seven supervisors reported how many years they have practiced mindfulness meditation, and among these supervisors their length of practice varied from no experience to 38 years of experience ($M = 3.99$, $SD = 8.01$, $N = 78$). Among the 37 supervisors that reported having practiced mindfulness meditation, their meditation practice

experience ranged from 3 months to 38 years ($M = 8.41$, $SD = 9.95$, $N = 37$). Total time per week of practicing meditation was filled out by 33 of the supervisors and ranged from 0 minutes to 315 minutes per week (i.e. 5.25 hours per week) ($M = 45.49$, $SD = 82.34$, $N = 78$). Among the 33 supervisors, total time per week varied from 5 minutes to 315 minutes (i.e. 5.25 hours per week) ($M = 107.52$, $SD = 97.14$, $N = 33$). Frequency of meditation practice among the entire supervisor sample varied from 0 to 14 times per week ($M = 1.66$, $SD = 2.96$, $N = 78$). Frequency of meditation practice was filled out by 32 of the supervisors, and among these 32 supervisors ranged from .25 to 14 times per week ($M = 4.05$, $SD = 3.42$, $N = 32$).

In terms of other spiritual practices or meditation traditions, 46 (59%) supervisors reported regularly engaging in other spiritual practices or meditation traditions and 32 (41%) reported not practicing other spiritual practices. Qualitative data was collected on the types of spiritual practices practiced by supervisors, which included the following (See Table 11): 4 (5.1%) reported practicing yoga, 2 (2.6%) reported practicing yoga and dance, 1 (1.3%) reported practicing tai chi, 7 (9%) reported walking in nature as spiritual practice, 5 (6.4%) reported attending church services, 10 (12.8%) reported prayer, 6 (7.7%) reported prayer in addition to reading scripture and attending church services or mass, 4 (5.1%) reported exercise, 1 (1.3%) reported guided imagery, 1 (1.3%) reported that practicing competent science and humanism as spiritual practice, and 3 (3.8%) reported practicing other meditation traditions including 1 (1.3%) practicing Transcendental meditation, 1 (1.3%) practicing Zazen (Zen meditation), 2 (2.6%) reported practicing chi gong, contemplative prayer, self guided imagery and concentrative meditation, and 1 (1.3%) practicing Metta meditation. Among the entire supervisor sample, total time per week of other spiritual practices varied from 0 minutes to 210 minutes per week (i.e. 3.5 hours per week) ($M = 21.95$, $SD = 49.62$, $N = 78$). Total time per week of other spiritual practices

was filled out by 19 of the supervisors and, among these 19 supervisors, varied from 2 minutes to 210 minutes per week (i.e. 3.5 hours per week) ($M = 90.11$, $SD = 63.64$, $N = 19$). Among the entire supervisor sample frequency of practicing other spiritual practices ranged from 0 to 21 times per week ($M = 1.62$, $SD = 3.55$, $N = 78$). Frequency of practicing other spiritual practices was filled out by 22 of the supervisors and among these 22 supervisors varied from 1 to 21 times per week ($M = 5.73$, $SD = 4.64$, $N = 22$).

Table 11

Other Spiritual Practices/Meditation Traditions of Supervisors (N = 46)

Yoga	4
Yoga and Dance	2
Tai Chi	1
Walking in Nature	1
Attending Church	1
Prayer	10
Prayer + Reading Scripture + Attending Church or Mass	6
Exercise	4
Guided Imagery	1
Competent Science + Humanism	1
Transcendental Meditation	1
Zazen (Zen Meditation)	1
Chi Gong + Contemplative Prayer, Self-Guided Imagery + Concentrative Meditation	2
Metta Meditation	1

In terms of relaxation practice, 46 (59%) supervisors reported practicing a regular relaxation technique for the purposes of relaxation besides mindfulness meditation and 32 (41%) supervisors reported not practicing relaxation. Qualitative data were collected on the types of relaxation practices of supervisors, which included the following (See Table 12): 9 (11.5%) reported practicing yoga, 2 (2.6%) reported mindfulness based stress reduction body scan, 1 (1.3%) reported body scan and progressive relaxation, 2 (2.6%) reported progressive relaxation,

2 (2.6%) reported movement, 2 (2.6%) reported self-hypnosis, 10 (12.8%) reported some form of exercise such as running, swimming, walking, etc., 5 (6.4%) reported a breathing technique, 4 (5.1%) reported listening to guided meditation or relaxation, 1 (1.3%) reported walking meditation, 1 (1.3%) reported practicing 5 simple sense awareness, and 1 (1.3%) reported chanting, vanaprasthya contemplations, and grihasthya care. Among the entire supervisor sample, total time per week of relaxation practices ranged from 0 minutes to 2100 minutes per week (i.e. 35 hours per week) ($M = 66.92$, $SD = 245.99$, $N = 78$). Total time per week of relaxation practices was filled out by 27 of the supervisors and among these 27 supervisors ranged from 15 minutes to 2100 minutes per week (i.e. 35 hours per week) ($M = 193.33$, $SD = 392.20$, $N = 27$). Among the entire supervisor sample, frequency of practicing relaxation varied from 0 to 7 times per week ($M = 1.44$, $SD = 2.37$, $N = 78$). Frequency of practicing relaxation was filled out by 25 of the supervisors and among these 25 supervisors varied from 2 to 7 times per week ($M = 4.5$, $SD = 1.90$, $N = 25$).

Table 12

Supervisors' Relaxation Practices (N = 46)

Yoga	9
Mindfulness-Based Stress Reduction Body Scan	2
Body Scan and Progressive Relaxation	1
Progressive Relaxation	2
Movement	2
Self-Hypnosis	2
Exercise (Running, Swimming, Walking)	10
Breathing Technique	5
Guided Meditation or Relaxation	4
Walking Meditation	1
5 Simple Sense Awareness	1
Chanting, Vanaprasthya Contemplations, & Grihasthya Care	1

Measures

Mindfulness.

The Five-Factor Mindfulness Questionnaire (FFMQ) (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) is a 39-item self-report instrument that was used to measure counselor trainees' self-perceived mindfulness on five dimensions: 1) Non-reactivity to inner experience (i.e., Non-Reactivity subscale); 2) Observing and noticing sensations, perceptions, thoughts, and feelings (i.e., Observing subscale); 3) Acting with awareness, concentration, and non-distraction (i.e., Acting with Awareness subscale); 4) Describing and labeling experience with words (i.e., Describing subscale); and 5) Non-judging of experience (i.e., Non-judging subscale). Sample items of the Non-Reactivity subscale included "I watch my feelings without getting lost in them" and "In difficult situations, I can pause without immediately reacting." Sample items from the Observing subscale included "I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing" and "I notice the smells and aromas of things". Sample items of the Acting with Awareness subscale included "I rush through activities without being really attentive to them" and "I find it difficult to stay focused on what's happening in the present". Sample items from the Describing subscale included "I can usually describe how I feel at the moment in considerable detail" and "My natural tendency is to put my experiences into words." Sample items on the Non-judging subscale included "I tell myself I shouldn't be thinking the way I'm thinking" and "I think some of my emotions are bad or inappropriate and I shouldn't feel them."

The FFMQ used a 5-point Likert scale with 1 = *never or very rarely untrue* and 5 = *very often or always true*. In the current study, the FFMQ had adequate to good internal consistency

with alpha coefficients as follows: Total FFMQ = .92; Non-React = .82; Describe = .89; Observe = .84; Non-Judge = .92, Act with Awareness = .87.

This is consistent with previous research in which all five subscales have demonstrated adequate to good internal consistency. Alpha coefficients in previous research were estimated as follows: the 7-item Non-Reactivity subscale = .75; the 8-item Observing subscale = .83; the 8-item Acting with Awareness subscale = .87; and the 8-item Describing with Awareness subscale = .91; and the 8-item Non-judging subscale = .87 (Baer et al., 2006). A regression analysis found that the five factors do not significantly overlap. Hierarchical modeling suggests that Acting with Awareness, Describing experience with words, Non-judging, and Non-Reactivity are factors of a “broad mindfulness construct” (Baer et al., 2006, p. 38). In addition, hierarchical modeling suggests that the Observing factor may fit this hierarchal model for persons with meditation experience. The Acting with Awareness scale was reverse coded. The total mindfulness score was computed by reversing the Acting with Awareness subscale, then adding up the raw scores from all of the subscales. The greater the total score, the greater mindfulness one has (Baer et al., 2006).

The five factors of mindfulness correlate with the following constructs at the $p < .001$ level: a) openness to experience (Observing = .42; Describe = .19; and Non-Reactive = .18), b) emotional intelligence (Observing = .22; Describe = .60; Acting with Awareness = .31; Non-Judging = .37; Non-Reactive = .21), and c) self-compassion (Observing = .14; Describe = .30; Acting with Awareness = .40; Non-Judging = .48; Non-reactive = .53) (Baer et al., 2006). Empirical research supports that these five factors are negatively correlated with dissociation, absent-mindedness, thought suppression, difficulties with emotion regulation, experiential avoidance, neuroticism, and alexithymia (Baer et al., 2006). Acting with Awareness, Non-

Judging, and Non-Reactivity have been found to have incremental validity in predicting the level of psychological symptoms as measured by the Brief Symptom Inventory (BSI) (Derogatis, 1992) (Baer et al., 2006). The BSI measures nine primary symptom dimensions: somatization, obsessive-compulsiveness, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism as well as assesses a global index of distress (GSI) (Derogatis, 1992).

The construct validity of the FFMQ has recently been investigated in meditating and non-meditating samples (Baer et al., 2008). After adequate to good internal consistency was verified across both meditating and non-meditating samples, the FFMQ's factor structure was examined in the meditating sample since the factor structure was already established in non-meditating samples in Baer et al. (2006). Even with age and education held constant, meditators scored significantly higher on four out of five mindfulness factors (excluding Acting with Awareness). Alpha coefficients for all mindfulness factors were moderately strong ranging from .72 to .92, except that the alpha coefficient for the non-reactivity factor was estimated at .67. Intercorrelations of the factor structure and five mindfulness factors were explored only in the meditating sample and ranged from .32 to .56 ($p < .01$) (Baer et al., 2008).

Baer et al. (2008) found that meditation develops mindfulness skills as measured by the FFMQ, which facilitate positive psychological functioning in long-term meditation practitioners. The relationship between mindfulness factors of the FFMQ and psychological well-being as measured by the total score of the psychological well-being scale (PWB; Ryff, 1989) was examined. The PWB measures six elements of well-being including self-acceptance (positive attitude about both good and bad qualities of one's life, past, and self), positive, warm, trusting and satisfying relations with others, autonomy (ability to follow own standards, resist social

pressures and be independent), environmental mastery (ability to be competent in managing demands of life), purpose in life (direction and goals and having a sense of meaning of life), and personal growth (having a concept of self as growing and open to experiences) (Ryff, 1989). All of the correlations between mindfulness factors and psychological well-being were significant and positive across samples who took the PWB, except the Observing factor. The Observing factor was significantly correlated in the meditating sample only, which is consistent with Baer et al. (2006)'s hypothesis that the tendency to notice internal and external stimulus is strongly correlated to psychological well-being in meditators only. In at least a highly educated sample, all mindfulness factors, except the Observing factor, accounted for 39% of the variance in significantly predicting psychological well-being. Thus, at least in a highly educated sample, four of five mindfulness factors have incremental validity over the others in predicting psychological well-being (Baer et al., 2008).

While the limitations of self-report measures of mindfulness have previously been discussed in chapter 2, the FFMQ is currently the best means to measure trainees' mindfulness and is considered reasonably psychometrically sound. Nonetheless, the FFMQ does rely on trainees' ability to accurately self-report their mindfulness.

Differentiation of Self.

The Differentiation of Self Inventory-Revised (DSI-R) (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003) was used to measure trainees' perceived differentiation in their current relationships with their family of origin and significant relationships. The DSI-R is identical to the original DSI (Skowron & Friedlander, 1998), but with improvements to the Fusion with Others subscale. The DSI-R is a 46-item multidimensional self-report measure that is specifically for adults ages 25 years and older. Items were rated on a 6-point Likert scale with

scores ranging from 1 = “*not at all true of me*” to 6 = “*very true of me*”. The DSI was composed of four subscales: Emotional Reactivity, Emotional Cutoff, Fusion with Others, and I Positions. The Emotional Reactivity subscale consisted of 11 items, which measured the degree to which one responds to one’s environment with emotional flooding, hypersensitivity or emotional lability. Sample items included “At times my feelings get the best of me and I have trouble thinking clearly” and “People have remarked that I’m overly emotional.” The Emotional Cutoff subscale consisted of 12 items that measured the degree to which one feels threatened by intimacy and feels extremely vulnerable in relationships with others. Sample items included “I often feel inhibited around my family” and “When things go wrong, talking about them usually makes it worse”. The Fusion with Others subscale contained 12 items measuring the degree of one’s emotional over-involvement with other people which included over-identification and triangulation with one’s parents. Sample items included “I feel it’s important to hear my parents opinions before making decisions” and “I often agree with others just to appease them”. The I Position subscale contained 11 items that measured one’s ability to maintain a cohesive clear sense of self and one’s ability to conscientiously follow one’s convictions when experiencing pressure to do otherwise. Sample items included “I tend to remain pretty calm even under stress” and “I am able to say no to others even when I feel pressured by them” (Skowron & Schmitt, 2003).

In order to calculate the total DSI score, raw scores were reversed on all of the items from the Emotional Cutoff and Emotional Reactivity subscales, all but one item (#37) on Fusion with Others subscales and on one item (#35) of the I Position subscale. The raw scores from all the items were added up to get a total sum, and then were divided by the total number of items (46). The total full-scale score can range from 1 (reflecting low differentiation) to 6 (reflecting high

differentiation). In order to compare the full-scale score with scores from each subscale, each subscale score was calculated by reversing the reverse scored items, adding up the item scores to get a total of each subscale, and then dividing the total of each subscale by the number of items in the given subscale (Emotional Cutoff = 12, Fusion with Others = 12, I Position = 11, and Emotional Reactivity = 11). The scores on each given subscale can range from 1 (reflecting low differentiation) to 6 (reflecting high differentiation). Thus, the greater the score on both the total full-scale score and on each subscale, the greater level of differentiation (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003).

Cronbach's alpha has been estimated at .92 for the total DSI-R scale; .89 for Emotional Reactivity; .81 for I Position; .84 for Emotional Cutoff; and .86 for Fusion with Others (Skowron & Schmitt, 2003). Correlations between the subscales range from .24 for the intercorrelation between Emotional Cutoff and Fusion with Others subscales to .66 for the intercorrelation between Fusion with Others and Emotional Reactivity (Skowron & Schmitt, 2003). For the current study, the DIS-R had good internal consistency with the alpha coefficient = .92 for the total DSI-R scale; .86 for the 11-item Emotional Reactivity subscale; .85 for the 12-item Emotional Cutoff subscale; .80 for the 12-item Fusion with Others subscale; and .82 for the 11-item I-Position subscale.

Countertransference Management.

The Countertransference Factors Inventory (CFI) (Hayes, Gelso, Van Wagoner, & Diemer, 1991; Van Wagoner, Gelso, Hayes, & Diemer, 1991) was used to measure the degree to which counselor trainees possessed the theorized and empirically supported five factors that facilitate countertransference management. These five characteristics were measured on five subscales of 1) Self-Insight, 2) Self-Integration, 3) Empathy, 4) Anxiety Management, and 5)

Conceptualizing Ability. The CFI was originally a 50-item instrument that counselor trainees' supervisors used to evaluate the degree to which they perceive their supervisees possessing these five characteristics. Supervisors rate supervisees globally on these factors rather than based on supervisees' behavior in one particular session or with on particular client (Van Wagoner et al., 1991).

The Self-Insight subscale consisted of 11 items and measured the extent that therapists were aware of their own feelings. Sample items included "usually comprehends how his/her feelings influence him/her in therapy", and "understands the background factors in his/her life that have shaped his/her personality". The Self-Integration subscale consisted of 11 items and measured that therapists' ability to effectively differentiate themselves from others including prioritizing clients' needs over their own. Sample items included "is psychologically balanced" and "effectively distinguishes between clients' needs and his/her own needs". The Empathy subscale consisted of 11 items and measured the extent therapists possessed the conceptual understanding of another person's experience, and affective empathy, which is the ability to temporarily engage in another's' feelings as though therapists' were in their shoes. Sample items included "intuitively understands that clients" and "is perceptive in his/her understanding of clients". The Anxiety Management subscale consisted of 8 items and measured the degree to which therapists experienced state anxiety in counseling and general trait anxiety. Sample items included "does not experience a great deal of anxiety while conducting therapy" and "is comfortable in the presence of strong feelings from others". The Conceptualizing Ability subscale consisted of 9 items and measured the extent therapists could conceptualize the dynamics between therapist and client in the therapeutic relationship and given the client's past. Sample items included "conceptualizes relationship dynamics in terms of the client's past" and

“often conceptualizes his/her role in what transpires in the counseling relationship”. The CFI used a 5-choice Likert scale with 1 = *strongly disagree* and 5 = *strongly agree*, with a higher score reflecting more of a given countertransference management characteristic (Van Wagoner et al., 1991).

Construct validity was established by having 122 experienced psychotherapists rate therapists whom they considered to be excellent in the field on countertransference management using the CFI. Compared to average therapists, therapists rated as “excellent” were rated as having all 5 therapist qualities theorized to facilitate countertransference management and also received higher total countertransference management scores (Van Wagoner et al., 1991). Content validity was established for items by mailing the CFI to 33 professional experts in the field of countertransference and transference (Hayes et al., 1991). These experts rated each item as to its importance to countertransference management. Items were rated on a 5-choice Likert scale with 1 = *Not Important*, 2 = *Slightly Important*, 3 = *Somewhat Important*, 4 = *Important*, 5 = *Very Important*. Experts found that the items accurately represent salient dimensions of countertransference management and that items reflect each of the five factors (Hayes et al., 1991). Latts (1997) revised the CFI to capture therapists’ performance in counseling as opposed to general global traits. Criterion-related validity with counselor effectiveness was established which suggests that effective counseling may be related to therapists’ ability to effectively manage countertransference (Latts, 1997).

The CFI has been found to negatively correlate with countertransference behavior in both an actual therapy session (Friedman & Gelso, 2000; Hayes, Riker, & Ingram, 1997) and in a given therapy session in a laboratory setting (Gelso, Fassinger, Gomez, & Latts, 1995). The CFI completed by supervisors has high internal consistency with the alpha coefficient for the total

scale has been estimated at .97 and each for each subscale as follows: Self-Insight = .91; Self-Integration = .91; Empathy = .92; Anxiety Management = .92; and Conceptualizing Ability = .88 (Van Wagoner et al., 1991). In the current study, the CFI had high internal consistency with the alpha coefficient for the total scale at .94 and each for each subscale as follows: Self-Insight = .80; Self-Integration = .87; Empathy = .83; Anxiety Management = .75.

Social Desirability.

The Marlowe-Crowne Social Desirability Scale Short Form (M-C form C; Reynolds, 1982) was used to measure social desirability response bias, the degree people tried to present themselves in a favorable light. This scale was a 13-item short version of the original 33-item Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). Supervisees completed true or false statements that described behaviors that are socially desirable or not socially desirable. Items included “I’m always willing to admit it when I make a mistake” and “There have been times when I was quite jealous of the good fortune of others”. Higher scores indicated greater socially desirable response bias. Reynolds (1982) has found that the M-C form C has strong concurrent validity with a correlation of .41 with the Edwards Social Desirability Scale (Edwards, 1957) and acceptable reliability (K-R 20 = .76). In the current study, the MC form C had adequate internal consistency with Cronbach’s Alpha = .74.

Procedure

All accredited Masters, Ph.D., and Psy.D. programs in humanistic, existential and transpersonal psychology that were listed through websites of the Association of Transpersonal Psychology (http://www.atpweb.org/public_resources.asp) and the Association of Humanistic Psychology (http://www.ahpweb.org/aboutahp/hum_edu.html) were invited to participate. Additional listings of graduate programs in transpersonal or humanistic psychology were found

at: <http://www.sonoma.edu/projects/os2/grad/os2gradschoolp3.htm#region>. In addition, graduate students in the Counselor Education, Counseling Psychology and Rehabilitation Services Department and in the Clinical Psychology program at the Pennsylvania State University were invited to participate.

Supervisees needed to be seeing clients in either a masters-level or doctoral-level practicum, post-practicum/ex-ternship and/or internship and/or earning hours for licensure in order to participate. Participants were recruited from three training clinics, two university counseling centers and two community mental health centers in the Western, Rocky Mountain, Mid-Atlantic, and Northeastern regions of the United States. Supervisees and their clinical supervisors were recruited to voluntarily participate in the study via an e-mail announcement or by having the principal investigator announce in the study in one of the supervisee's classes. All participants were told that the study was on therapist qualities and psychotherapy. Supervisees interested in participating received an e-mail with a link to electronic versions of the informed consent form, the FFMQ, the DSI, and a demographic questionnaire. The demographic and background questionnaire was a revised version of the clinical data form used in Kholooci (2007), which asked demographic information regarding participants' gender and ethnicity and information including the duration and frequency of any mindfulness meditation practice, and the duration and frequency of any other spiritual practices they regularly engaged in. Counselor trainees provided their permission for their clinical supervisors to be contacted via e-mail. Clinical supervisors were be contacted by e-mail and given a link to electronic versions of an informed consent form, the demographic questionnaire, followed by the CFI. Informed consent forms included a paragraph explaining the following: a) the purpose of the study; b) that all responses would be anonymous and confidential; and c) that participation in the study was

voluntary. Participants had the option of receiving a \$5.00 gift certificate to amazon.com or Starbucks for completing the study. The principal investigator followed up with non-responders by e-mail. The institutional review board of Pennsylvania State University approved procedures for this study.

Chapter IV

Results

Preliminary Analyses

The assumptions of each statistical analysis were met and no outliers were found among the data. There were no missing data for the main measures. There were 8 pieces of missing data concerning “total time per week of mindfulness meditation practice” from the 47 supervisees who reported mindfulness meditation experience. There were 6 pieces of missing data for the “frequency of mindfulness meditation practice” from the 47 supervisees who reported mindfulness meditation experience. All measures had acceptable levels of skewness and kurtosis. Means, standard deviations, ranges, skew and kurtosis for each of the measures and their subscales are presented in Table 13.

Since 12 of the 78 total supervisors had more than one supervisee, supervisor effects were a potential confound in the study. The design effect (Kish, 1965; 1995) is the extent to which any dependency due to supervisor effects influences supervisors’ CFI-R ratings. In order to calculate the design effect, it is necessary to determine the magnitude of the intraclass correlation coefficient (ICC) and the average cluster size (n). The ICC represents the extent to which scores of supervisees who share the same supervisor are more similar to each other compared to scores of supervisees who do not share the same supervisor (Kish, 1965; 1995). The ICC was examined for countertransference management total scores since the CFI-R was the only measure completed by supervisors. The ICC for the CFI-R was .27. The average cluster size was 2.07, which means that among the 12 supervisors who had more than one supervisee, these supervisors had an average of 2.07 supervisees. The overall design effect was 1.29, which was calculated using the standard formula for design effect ($1 + ICC(n-1)$). Using the rule of thumb

established by Kish (1965; 1995), since the overall design effect was less than 2, any dependency in the data did not significantly influence variance among the 12 supervisors with more than one supervisee. Since there was no significant dependency in the CFI-R data, data were treated as being independent for all other analyses. For primary analyses, $p < .05$ was used to determine statistical significance.

Table 13

Descriptive Statistics

Variables	N	Range	Minimum	Maximum	Mean	SD	Skew	Kurtosis
MMed. Practice (yrs)	100	40	0	40	3.68	7.99	3.32	11.28
FFMQ Total Score	100	2.13	2.54	4.67	3.54	.42	.11	.16
FFMQ Observe	100	3.13	1.63	4.75	3.48	.66	-.25	-.29
FFMQ Describe	100	2.88	2.13	5.00	3.86	.60	-.22	-.23
FFMQ Aware	100	3.13	1.75	4.88	3.37	.59	-.26	.19
FFMQ Non-Judge	100	3.38	1.63	5.00	3.66	.70	-.37	.33
FFMQ Non-React	100	2.57	2.00	4.57	3.32	.55	-.12	-.26
DSI Total Score	100	2.76	2.72	5.48	4.08	.60	-.07	-.30
DSI Emo Reactivity	100	4.27	1.36	5.64	3.60	.87	-.27	-.21
DSI Emo Cut-off	100	3.58	2.42	6.00	4.76	.77	-.55	-.15
DSI I-Position	100	3.36	2.18	5.55	4.17	.73	-.66	.07
DSI Fusion	100	4.25	1.33	5.58	3.76	.78	-.29	-.08
CFI Total Score	78	2.00	3.00	5.00	3.99	.46	.17	-.53
CFI Empathy	78	2.50	2.50	5.00	4.10	.55	-.27	.12
CFI Anxiety Mgmt	78	2.75	2.25	5.00	3.94	.60	-.58	.19
CFI Self-Insight	78	2.13	2.88	5.00	3.85	.50	.35	-.34
CFI Self-Integration	78	2.00	3.00	5.00	4.07	.48	.10	-.53
CFI Conceptualizing	78	3.00	2.00	5.00	3.97	.76	.51	.25
SD Total Score	100	.85	1.00	1.85	1.37	.23	.07	-.97

Note: MMeditation Practice = mindfulness meditation practice in years; Total Time per week of MMeditation Practice = total minutes per week of mindfulness meditation practice; Frequency per week of MMeditation Practice = number of times per week of mindfulness meditation practice; FFMQ = Five Facet Mindfulness Questionnaire; DSI = Differentiation of Self Inventory; CFI-R = Countertransference Factors Inventory-Revised; SD = The Marlowe-Crown Social Desirability Scale Short Form.

Primary Analyses

Hypothesis 1. The first hypothesis was that meditation experience would have a direct relationship with mindfulness among supervisees. An independent t-test was conducted to compare the FFMQ total scores for supervisees who do and do not practice mindfulness meditation. As expected, there was a statistically significant difference in FFMQ total scores for supervisees who practice mindfulness meditation ($M = 3.68$, $SD = .44$, $N = 47$) compared with those who do not ($M = 3.43$, $SD = .37$, $N = 53$), $t(98) = 3.13$, $p < .01$ (2-tailed) (see Table 14). The magnitude of the differences in the means was small (*eta squared* = .03).

A one-way between-groups multivariate analysis of variance was conducted to investigate differences of the FFMQ subscales between supervisees who do and do not practice mindfulness meditation. Preliminary assumptions were met for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Alpha was set at .01 to minimize the probability of a Type I error. There was a statistically significant difference between meditators and non-meditators on the combined FFMQ subscales, $F(5, 94) = 7.64$, $p = .000$; Wilks' Lambda=.71; partial eta squared = .29. When specifically looking at the FFMQ Subscales, two FFMQ Subscales reached statistical significance: the Observe Subscale, $F(1, 98) = 24.97$, $p = .000$, *partial eta squared* = .20 and the Non-React Subscale, $F(1, 98) = 12.33$, $p = .001$, *partial eta squared* = .11. Mean scores indicated that meditators reported higher on all of the FFMQ subscales than non-meditators as shown in Table 14.

Table 14

Relationship Between Mindfulness Meditation Practice and FFMQ

Current or Past Mind. Meditation Practice		Mindfulness	Observe	Describe	Act with Awareness	Non-Judge	Non-React
Yes	Mean	3.68	3.80	3.95	3.43	3.68	3.52
	Std. Deviation	.44	.58	.63	.56	.81	.55
	N	47	47	47	47	47	47
No	Mean	3.43	3.20	3.78	3.32	3.64	3.15
	Std. Deviation	.37	.60	.56	.62	.60	.50
	N	53	53	53	53	53	53
Total	Mean	3.54	3.48	3.86	3.37	3.66	3.32
	Std. Deviation	.42	.66	.60	.59	.70	.55
	N	100	100	100	100	100	100

Note: Mindfulness = Mindfulness Total Score, Observe = FFMQ Observe Subscale, Describe = FFMQ Describe Subscale, Act with Awareness = FFMQ Act with Awareness Subscale, Non-Judge = FFMQ Non-Judge Subscale, Non-React = FFMQ Non-React Subscale.

The relationship between years of meditation experience and FFMQ total scores was examined using Pearson correlation coefficients. Cohen and Cohen (1983) advised that correlations ranging from .10 to .29 are considered small effects, .30 to .49 are considered medium effects, and .49 and higher are considered large effects. Results support the hypothesis of a direct, medium relationship between years of mindfulness meditation experience and FFMQ total scores ($r = .40$, $N = 100$, $p_{(one-tailed)} < .01$).

The relationship between meditation experience as measured by total time in minutes of practice per week and the FFMQ was examined using Pearson correlation coefficient. Results

support the hypothesis that there is a direct relationship between mindfulness meditation experience as measured by total time in minutes of practice per week and the FFMQ ($r = .46$, $N = 93$, $p_{(one-tailed)} < .01$).

The relationship between meditation experience as measured by the frequency of mindfulness meditation practice per week and the FFMQ was examined using Pearson correlation coefficient. Results support the hypothesis that there is a direct relationship between mindfulness meditation experience as measured by the frequency of mindfulness meditation practice per week and the FFMQ ($r = .46$, $N = 95$, $p_{(one-tailed)} < .01$). In conclusion, results support the first hypothesis that among supervisees there is a direct relationship between mindfulness meditation experience per three different measures of meditation practice and overall mindfulness.

Hypothesis 2. The second hypothesis was that supervisees' mindfulness would have a direct relationship with supervisors' ratings of their countertransference management ability. The relationship between the FFMQ total score and the CFI-R total score was examined using a Pearson correlation coefficient. Results supported the hypothesis ($r = .21$, $N = 78$, $p_{(one-tailed)} < .05$). Correlations between the subscales of the FFMQ and CFI-R are reported in Table 15. Few subscale correlations were significant and the magnitude of the correlations tended to be small. The Non-React subscale of the FFMQ was significantly positively correlated with the CFI-R total score ($r = .321$, $N = 78$, $p_{(one-tailed)} < .01$), and with the following CFI-R subscales: Anxiety Management ($r = .292$, $N = 78$, $p_{(one-tailed)} < .01$), Self-Insight ($r = .330$, $N = 78$, $p_{(one-tailed)} < .01$), Self-Integration ($r = .294$, $N = 78$, $p_{(one-tailed)} < .01$).

Table 15

Subscale Correlations between FFMQ and CFI-R

	1	2	3	4	5	6	7	8	9	10	11
<u>FFMQ (N=100)</u>	1										
Observe	.60**	1									
Describe	.63**	.31**	1								
Act w	.69**	.21*	.29**	1							
Awareness											
Non-Judge	.74**	.16	.28**	.43**	1						
Non-React	.73**	.29**	.25**	.43**	.57**	1					
<u>CFI-R (N = 78)</u>	.21*	.09	.07	.13	.13	.32**	1				
Empathy	.12	.03	.14	.02	.05	.21*	.78**	1			
Anxiety Mgmt	.23*	.12	.01	.18	.21*	.29**	.81**	.48**	1		
Self-Insight	.20*	.14	.07	.10	.07	.33**	.92**	.68**	.64**	1	
Self-Integration	.21*	.04	.06	.16	.17	.29**	.95**	.67**	.75**	.81**	1
Conceptualizing	.07	.13	-.02	.04	-.03	.13	.76**	.70**	.54**	.66**	.67**

Note: FFMQ = Five Facet Mindfulness Questionnaire; 1. FFMQ Total Score, 2. Observe Subscale, 3. Describe Subscale, 4. Act with Awareness Subscale, 5. Non-Judge Subscale, 6. Non-React Subscale. CFI-R = Countertransference Factors Inventory-Revised; 7. CFI-R Total Score, 8. Empathy Subscale, 9. Anxiety Management Subscale, 10. Self-Insight Subscale, 11. Self-Integration Subscale, 12. Conceptualizing Ability Subscale.

* p (one-tailed) < .05

** p (one-tailed) < .01

Hypothesis 3. The third hypothesis was that supervisees' ratings of their mindfulness and differentiation of self would be directly related. The relationship between the FFMQ total score and the DSI total score was examined using a Pearson correlation coefficient. Results did support the hypothesis ($r = .61, N = 100, p_{(one-tailed)} < .01$). Correlations between subscales of the FFMQ and the DSI are reported in Table 16.

There were several significant subscale correlations with the magnitudes of the correlations ranging from small to medium. FFMQ total scores significantly related with all of the subscales of the DSI as follows: Emotional Reactivity ($r = .400, N = 100, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .254, N = 100, p_{(one-tailed)} < .01$), I-Position ($r = .654, N = 100, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .573, N = 100, p_{(one-tailed)} < .01$).

The Describe subscale of the FFMQ significantly related with the total DSI score and all of the subscales of the DSI, except for the Emotional Reactivity subscale, as follows: DSI Total Score ($r = .360, N = 100, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .271, N = 100, p_{(one-tailed)} < .01$), I-Position ($r = .280, N = 100, p_{(one-tailed)} < .01$) and Fusion with Others ($r = .433, N = 100, p_{(one-tailed)} < .01$).

The Act with Awareness subscale of the FFMQ significantly related with the total DSI score and all of the subscales of the DSI as follows: DSI Total Score ($r = .457, N = 100, p_{(one-tailed)} < .01$), Emotional Reactivity ($r = .325, N = 100, p_{(one-tailed)} < .01$), I-Position ($r = .493, N = 100, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .388, N = 100, p_{(one-tailed)} < .01$).

Table 16

Subscale Correlations between FFMQ and DSI

	1	2	3	4	5	6	7	8	9	10	11
<u>FFMQ (N=100)</u>	1										
Observe	.60**	1									
Describe	.63**	.31**	1								
Act w Awareness	.69**	.21*	.29**	1							
Non-Judge	.74**	.16	.28**	.43**	1						
Non-React	.73**	.29**	.25**	.43**	.57**	1					
<u>DSI (N = 100)</u>	.61**	.04	.36**	.46**	.63**	.61*	1				
Emotional Reactivity	.40**	-.08	.12	.33**	.48**	.56**	.85**	1			
Emotional Cut-Off	.25**	-.08	.27**	.20*	.34**	.11	.59**	.31*	1		
I-Position	.65**	.21*	.28**	.49**	.60**	.66**	.75**	.55**	.19*	1	
Fusion with Others	.57**	.11	.43**	.39**	.50**	.53**	.84**	.69**	.27**	.58**	1

Note: FFMQ = Five Facet Mindfulness Questionnaire; 1. FFMQ Total Score, 2. Observe Subscale, 3. Describe Subscale, 4. Act with Awareness Subscale, 5. Non-Judge Subscale, 6. Non-React Subscale. DSI = Differentiation of Self Inventory; 7. DSI Total Score, 8. Emotional Reactivity Subscale, 9. Emotional Cut-Off Subscale, 10. I Position Subscale, 11. Fusion with Others Subscale.

* p (one-tailed) < .05

** p (one-tailed) < .01

The Non-Judge subscale of the FFMQ significantly related with the total DSI score and all of the subscales of the DSI as follows: DSI Total Score ($r = .627, N = 100, p_{(one-tailed)} < .01$), Emotional Reactivity ($r = .481, N = 100, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .343, N = 100, p_{(one-tailed)} < .01$), I-Position ($r = .595, N = 100, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .502, N = 100, p_{(one-tailed)} < .01$).

The Non-React subscale of the FFMQ significantly related with the total DSI score and all of the subscales of the DSI, except the Emotional Cut-Off subscale, as follows: DSI as follows: Emotional Reactivity ($r = .564, N = 100, p_{(one-tailed)} < .01$), I-Position ($r = .660, N = 100, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .529, N = 100, p_{(one-tailed)} < .01$).

Hypothesis 4. The fourth hypothesis was that differentiation of self would have a direct relationship with countertransference management. The relationship between the DSI total score and the CFI-R total score was examined using a Pearson correlation coefficient. Results did not support the hypothesis ($r = .12, N = 78, p = .15$). Correlations between the subscales of the DSI and CFI-R are reported in Table 17. The only significant subscale correlations were between the I-Position subscale of the DSI and the CFI-R as follows: CFI-R Total Score ($r = .288, N = 78, p_{(one-tailed)} < .01$), Anxiety Management ($r = .330, N = 78, p_{(one-tailed)} < .01$), Self-Insight ($r = .194, N = 78, p_{(one-tailed)} < .01$), and Self-Integration ($r = .307, N = 78, p_{(one-tailed)} < .01$).

Table 17

Subscale Correlations between DSI and CFI-R

	1	2	3	4	5	6	7	8	9	10
<u>DSI (N = 100)</u>	1									
Emotional Reactivity	.85**	1								
Emotional Cut-Off	.59**	.31*	1							
I-Position	.75**	.55**	.19*	1						
Fusion with Others	.84**	.69**	.27**	.58**	1					
<u>CFI-R (N = 78)</u>	.12	.05	-.05	.29**	.09	1				
Empathy	.09	-.03	.05	.18	.08	.78**	1			
Anxiety Mgmt	.14	.11	-.05	.33**	.05	.81**	.48**	1		
Self-Insight	.08	.03	-.05	.19*	.08	.92**	.68**	.64**	1	
Self-Integration	.13	.08	-.07	.31**	.11	.95**	.67**	.75**	.81**	1
Conceptualizing	.01	-.06	-.08	.19	.01	.76**	.70**	.54**	.66**	.67**

Note: DSI = Differentiation of Self Inventory; 1. DSI Total Score, 2. Emotional Reactivity Subscale, 3. Emotional Cut-Off Subscale, 4. I Position Subscale, 5. Fusion with Others Subscale. CFI-R = Countertransference Factors Inventory-Revised; 7. CFI-R Total Score, 8. Empathy Subscale, 9. Anxiety Management Subscale, 10. Self-Insight Subscale, 11. Self-Integration Subscale, 12. Conceptualizing Ability Subscale.

* p (one-tailed) < .05

** p (one-tailed) < .01

Hypothesis 5. The fifth hypothesis was that meditation experience, mindfulness, and differentiation of self would account for a significant amount of variance in predicting countertransference management. Standard multiple regression was used to analyze this hypothesis. Multicollinearity was assessed for the total scores of each of the dependent variables. Based on recommended cut-off scores proposed by Tabachnick and Fidell (2007), there was no multicollinearity among the measures since there were no correlations above .70 among the measures as reported in Table 18, since tolerance values were more than .10, and variance inflation factor values (VIF) were less than 10 as reported in Table 19.

Results did support the hypothesis ($R = .34, R^2 = .11, R^2_{\text{adj}} = .08, p_{(\text{one-tailed})} < .05$) and the overall relationship was significant ($F_{(3,74)} = 3.18, p_{(\text{one-tailed})} < .05$) as presented in Table 19. The standardized regression coefficients indicate that mindfulness meditation experience (in years) significantly positively contributes to countertransference management with the effects of the other variables held constant, ($b = .29, p_{(\text{one-tailed})} < .05$). Mindfulness total scores and differentiation of self total scores did not significantly contribute to countertransference management.

Table 18

Correlations between CFI-R, Meditation Experience (yrs), FFMQ, and DSI (N=78)

	1	2	3	4
CFI-R	1			
Mindfulness Practice (yrs)	.32**	1		
FFMQ	.21*	.40**	1	
DSI	.12	.06	.61**	1

Note: 1. CFI = Countertransference Management Inventory; 2. Mindfulness Practice (yrs) = Years Supervisees Practiced Mindfulness Meditation; 3. FFMQ = Five Facet Mindfulness Questionnaire; 4. DSI = Differentiation of Self Inventory.

* p (one-tailed) < .05

** p (one-tailed) < .01

Table 19

Summary of Regression Analysis Predicting Countertransference Management from Combined Mindfulness Meditation Practice, FFMQ, and DSI (N = 78)

Variable	R ²	B	β	t	sr ²	Adj. R ²	Tolerance	VIF
1. Model	.11*					.08		
2. Mindfulness Practice (yrs)		.02	.29*	2.39	.26		.79	1.27
3. FFMQ		.06	.06	.36	.04		.50	2.01
4. DSI		.05	.07	.47	.05		.59	1.70

Note: B = The unstandardized regression coefficient, sr² = the semi-partial correlation. 1. Model = Combined Meditation Experience (yrs), FFMQ, and DSI; 2. Mindfulness Practice (yrs) = Years Supervisees Practiced Mindfulness Meditation; 3. FFMQ = Five Facet Mindfulness Questionnaire; 4. DSI = Differentiation of Self Inventory.

* p < .05

Additional Analyses

In order to account for social desirability, hypotheses 1-4 were analyzed using Pearson correlation coefficient controlling for social desirability as measured by the Marlow-Crowne Social Desirability Scale (M-C) completed by all 100 supervisees. For these additional analyses, $p < .01$ was used to determine significance to minimize the probability of a Type I error.

Hypothesis 1 When Controlling for Social Desirability. The first hypothesis that supervisees' meditation experience will have a direct relationship with supervisees' mindfulness was examined using a partial correlation coefficient while controlling for social desirability. Results supported the hypothesis that meditation experience, as measured in years, will have a direct relationship with the FFMQ even when controlling for social desirability ($r = .41$, $N = 100$, $p_{(one-tailed)} < .00$). This hypothesis was further supported by a direct relationship between the total time per week of mindfulness meditation practice (in minutes) and the FFMQ when controlling for social desirability ($r = .50$, $N = 93$, $p < .00$). The first hypothesis was also further supported by a direct relationship between the frequency per week of mindfulness meditation practice and the FFMQ when controlling for social desirability ($r = .49$, $N = 95$, $p < .00$). Thus, results confirm the hypothesis that there is a direct relationship between meditation experience and the FFMQ using three measures of meditation practice even when controlling for social desirability.

A one-way between-groups analysis of covariance was conducted to compare the FFMQ Subscale scores between supervisees who do and not practice mindfulness meditation controlling for social desirability. The independent variable was whether or not supervisees meditated. The dependent variables were the 5 FFMQ Subscales. The covariate was the M-C total score. Preliminary assumptions were met for normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate. When controlling

for social desirability, there was a significant difference between meditators and non-meditators on the FFMQ Observe Subscale, $F(1,97) = 24.93, p = .000, \text{partial eta squared} = .20$. When controlling for social desirability, there was a significant difference between meditators and non-meditators on the FFMQ Non-React Subscale, $F(1,97) = 15.62, p = .000, \text{partial eta squared} = .14$. There was a significant relationship between social desirability total score and the FFMQ Act with Awareness Subscale, $F(1,97) = 13.33, p = .000, \text{partial eta squared} = .12$. There was also significant relationship between social desirability total score and the FFMQ Non-React Subscale, $F(1,97) = 11.02, p = .001, \text{partial eta squared} = .10$. Adjusted mean scores indicated that meditators reported higher on all the FFMQ subscales than non-meditators when controlling for social desirability as shown in Table 20.

Table 20

Relationship between Mindfulness Meditation Practice and FFMQ Subscales Controlling for M-C

Current or Past Mind. Meditation Practice		Observe	Describe	Act with Awareness	Non-Judge	Non-React
Yes	Mean	3.80	3.95	3.43	3.68	3.52
	Std. Deviation	.58	.63	.56	.81	.55
	Adjusted Mean	3.80	3.96	3.44	3.69	3.54
	Std. Error	.09	.09	.08	.10	.07
No	Mean	3.20	3.78	3.32	3.64	3.15
	Std. Deviation	.60	.56	.62	.60	.50
	Adjusted Mean	3.20	3.78	3.31	3.63	3.14
	Std. Error	.08	.08	.08	.10	.07

Note: Observe = FFMQ Observe Subscale, Describe = FFMQ Describe Subscale, Act with Awareness = FFMQ Act with Awareness Subscale, Non-Judge = FFMQ Non-Judge Subscale, Non-React = FFMQ Non-React Subscale, Mean = Standard Mean, Adjusted Mean = Mean controlling for M-C Social Desirability Scale.

Hypothesis 2 When Controlling for Social Desirability. The second hypothesis that mindfulness will have a direct relationship with countertransference management was examined using Pearson correlation coefficient while controlling for social desirability. Results did not support the hypothesis at the .01 level, but was supported at the .05 level ($r = .24$, $N = 78$, $p_{(one-tailed)} < .05$). Correlations between subscales of the FFMQ and the CFI-R when controlling for social desirability are reported in Table 21. The Non-React subscale of the FFMQ had a significant direct relationship with the CFI-R even when controlling for social desirability as

follows: CFI-R Total Score, ($r = .352$, $p_{(one-tailed)} < .01$), Anxiety Management ($r = .282$, $p_{(one-tailed)} < .01$), Self-Insight ($r = .387$, $p_{(one-tailed)} < .01$), Self-Integration ($r = .319$, $p_{(one-tailed)} < .01$).

Table 21

Subscale Correlations between FFMQ and CFI-R Controlling for M-C

	1	2	3	4	5	6	7	8	9	10	11
<u>FFMQ (N=100)</u>	1										
Observe	.62**	1									
Describe	.63**	.31**	1								
Act w Awareness	.66**	.22*	.28**	1							
Non-Judge	.73**	.16	.27**	.40**	1						
Non-React	.71**	.30**	.24**	.38**	.56**	1					
<u>CFI-R (N = 78)</u>	.24*	.10	.08	.16	.15	.35**	1				
Empathy	.15	.03	.15	.04	.06	.24 *	.78**	1			
Anxiety Mgmt	.22*	.12	.00	.16	.20*	.28**	.82**	.49**	1		
Self-Insight	.24*	.14	.08	.16	.09	.39**	.92**	.67**	.66**	1	
Self-Integration	.23*	.04	.06	.19	.18	.32**	.95**	.67**	.76**	.82**	1
Conceptualizing	.09	.13	-.01	.08	-.02	.16	.76**	.70**	.55**	.65**	.67**

Note: FFMQ = Five Facet Mindfulness Questionnaire; 1. FFMQ Total Score, 2. Observe Subscale, 3. Describe Subscale, 4. Act with Awareness Subscale, 5. Non-Judge Subscale, 6. Non-React Subscale. CFI-R = Countertransference Factors Inventory-Revised; 7. CFI-R Total Score, 8. Empathy Subscale, 9. Anxiety Management Subscale, 10. Self-Insight Subscale, 11. Self-Integration Subscale, 12. Conceptualizing Ability Subscale.

* $p_{(one-tailed)} < .05$

** $p_{(one-tailed)} < .01$

Hypothesis 3 When Controlling for Social Desirability. The third hypothesis that mindfulness and differentiation of self would have a direct relationship was examined using Pearson correlation coefficient while controlling for social desirability. Results did support the hypothesis even when controlling for social desirability ($r = .58, N = 100, p_{(one-tailed)} < .00$). Subscale correlations of the FFMQ and DSI when controlling for social desirability are reported in Table 22.

There continued to be a statistically significant direct relationship between FFMQ total scores and all of the subscales of the DSI even when controlling for social desirability as follows: Emotional Reactivity ($r = .358, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .210, p_{(one-tailed)} < .05$), I-Position ($r = .632, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .541, p_{(one-tailed)} < .01$).

When controlling for social desirability, there continued to be a statistically significant direct relationship between the Describe subscale of the FFMQ and the DSI as follows: DSI Total Score ($r = .352, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .259, p_{(one-tailed)} < .01$), I-Position ($r = .267, p_{(one-tailed)} < .01$) and Fusion with Others ($r = .427, p_{(one-tailed)} < .01$).

When controlling for social desirability, there continued to be a statistically significant direct relationship between the Act with Awareness subscale of the FFMQ and the DSI as follows: DSI Total Score ($r = .388, p_{(one-tailed)} < .01$), Emotional Reactivity ($r = .260, p_{(one-tailed)} < .01$), I-Position ($r = .452, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .323, p_{(one-tailed)} < .01$).

When controlling for social desirability, there continued to be a statistically significant direct relationship between the Non-Judge subscale of the FFMQ and the DSI as follows: DSI Total Score ($r = .613, p_{(one-tailed)} < .01$), Emotional Reactivity ($r = .457, p_{(one-tailed)} < .01$), Emotional Cut-off ($r = .316, p_{(one-tailed)} < .01$), I-Position ($r = .579, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .479, p_{(one-tailed)} < .01$).

When controlling for social desirability, there continued to be a statistically significant direct relationship between the Non-React subscale of the FFMQ and the DSI score as follows: DSI as follows: DSI Total Score ($r = .568, p_{(one-tailed)} < .01$), Emotional Reactivity ($r = .530, p_{(one-tailed)} < .01$), I-Position ($r = .637, p_{(one-tailed)} < .01$), and Fusion with Others ($r = .489, p_{(one-tailed)} < .01$).

Table 22

Subscale Correlations between FFMQ and DSI Controlling for M-C

	1	2	3	4	5	6	7	8	9	10	11
<u>FFMQ (N=100)</u>	1										
Observe	.62**	1									
Describe	.63**	.31**	1								
Act w Awareness	.66**	.22*	.28**	1							
Non-Judge	.73**	.16	.27**	.40**	1						
Non-React	.71**	.30**	.24**	.38**	.56**	1					
<u>DSI (N = 100)</u>	.58**	.05	.35**	.39**	.61**	.57**	1				
Emotional Reactivity	.36**	-.08	.10	.26**	.46**	.53**	.84**	1			
Emotional Cut-Off	.21*	-.09	.26**	.14	.32**	.05	.56**	.27**	1		
I-Position	.63**	.22*	.27**	.45**	.58**	.64**	.73**	.52**	.15	1	
Fusion with Others	.54**	.12	.43**	.32**	.48**	.49**	.83**	.67**	.22*	.55**	1

Note: FFMQ = Five Facet Mindfulness Questionnaire; 1. FFMQ Total Score, 2. Observe Subscale, 3. Describe Subscale, 4. Act with Awareness Subscale, 5. Non-Judge Subscale, 6. Non-React Subscale. DSI = Differentiation of Self Inventory; 7. DSI Total Score, 8. Emotional Reactivity Subscale, 9. Emotional Cut-Off Subscale, 10. I Position Subscale, 11. Fusion with Others Subscale.

* $p_{(one-tailed)} < .05$

** $p_{(one-tailed)} < .01$

Hypothesis 4 When Controlling for Social Desirability. The fourth hypothesis that there would be a direct relationship between differentiation of self and countertransference management was examined using Pearson correlation coefficient while controlling for social desirability. Results did not support the hypothesis ($r = .15, N = 78, p_{(one-tailed)} = .10$). Subscale correlations of the DSI and CFI-R when controlling for social desirability are reported in Table 23. There were significant subscale correlations that tended to be small in magnitude between the DSI the I-Position subscale and CFI-R when controlling for social desirability as follows: CFI-R Total Score ($r = .321, p_{(one-tailed)} < .01$), Anxiety Management ($r = .322, p_{(one-tailed)} < .01$), Self-Integration ($r = .328, p_{(one-tailed)} < .01$).

Table 23

Subscale Correlations between DSI and CFI-R Controlling for M-C

	1	2	3	4	5	6	7	8	9	10
<u>DSI (N = 100)</u>	1									
Emotional Reactivity	.84**	1								
Emotional Cut-Off	.56**	.27**	1							
I-Position	.73**	.52**	.15	1						
Fusion with Others	.83**	.67**	.22*	.55**	1					
<u>CFI-R (N = 78)</u>	.15	.07	-.03	.32**	.11	1				
Empathy	.12	-.02	.08	.21*	.10	.78**	1			
Anxiety Mgmt	.12	.10	-.07	.32**	.03	.82**	.49**	1		
Self-Insight	.14	.06	-.01	.25*	.13	.92**	.67**	.66**	1	
Self-Integration	.16	.09	-.06	.33**	.13	.95**	.67**	.76**	.82**	1
Conceptualizing	.04	-.04	-.06	.22*	.03	.76**	.70**	.55**	.65**	.67**

Note: DSI = Differentiation of Self Inventory; 1. DSI Total Score, 2. Emotional Reactivity Subscale, 3. Emotional Cut-Off Subscale, 4. I Position Subscale, 5. Fusion with Others Subscale. CFI-R = Countertransference Factors Inventory-Revised; 7. CFI-R Total Score, 8. Empathy Subscale, 9. Anxiety Management Subscale, 10. Self-Insight Subscale, 11. Self-Integration Subscale, 12. Conceptualizing Ability Subscale.

* p (one-tailed) < .05

** p (one-tailed) < .01

Hypothesis 5 When Controlling for Social Desirability. The fifth hypothesis that meditation experience, mindfulness, and differentiation of self when combined will account for a significant amount of variance of countertransference management was supported at the $p < .05$ level in the primary analysis. Hierarchical multiple regression was used to analyze this hypothesis to control for social desirability. Multicollinearity was assessed for the total scores of each of the dependent variables. Based on recommended cut-off scores proposed by Tabachnick and Fidell (2007), there was no multicollinearity among the measures since there were no correlations above .70 among the measures as reported in Table 24 and since Tolerance values were more than .10 and Variance inflation factor values (VIF) were less than 10 as reported in Table 25.

Results did not support the hypothesis at the $p < .01$ level ($r = .36$, $r^2 = .13$, $R^2_{adj} = .08$, $p_{(one-tailed)} < .05$). Social desirability was entered as Model 1, explaining .4% of the variance of countertransference management, which was not significant. Model 2, comprising meditation experience, mindfulness, and differentiation of self combined, accounted for 7.9% of the variance of countertransference management when the effects of social desirability were statistically controlled for, $F_{(4,73)} = 2.64$, $p_{(one-tailed)} < .05$ as presented in Table 25. This indicates a strong model, but not significant at the $p < .01$ level. The standardized regression coefficients, as reported in Table 25, indicate that the unique significant contribution of mindfulness meditation experience to countertransference management was unchanged when controlling for social desirability at the .05 level, but not at the .01 level ($beta = .29$, $p_{(one-tailed)} < .05$). Social desirability, mindfulness and differentiation of self did not each make unique significant contributions to countertransference management. Thus, the fifth hypothesis that meditation experience, mindfulness, and differentiation of self when combined will account for a significant

amount of variance of countertransference management was not supported at the $p < .01$ level when controlling for social desirability.

Table 24

Correlations for CFI-R, Meditation Experience (yrs), FFMQ, DSI, and M-C (N=78)

	1	2	3	4	5
CFI-R	1				
Mindfulness Practice (yrs)	.32**	1			
FFMQ	.21*	.40**	1		
DSI	.12	.06	.61**	1	
M-C	-.06	.01	.25**	.33**	1

Note: 1. CFI = Countertransference Management Inventory; 2. Mindfulness Practice (yrs) = Years Supervisees Practiced Mindfulness Meditation; 3. FFMQ = Five Facet Mindfulness Questionnaire; 4. DSI = Differentiation of Self Inventory; 5. M-C = Marlow-Crowne Social Desirability Scale.

* p (one-tailed) $< .05$

** p (one-tailed) $< .01$

Table 25

Summary of Hierarchical Regression Analysis Predicting Countertransference Management from Combined Mindfulness Meditation Practice, FFMQ, and DSI, Controlling for M-C (N = 78)

Variable	R ²	B	β	t	sr ²	Adj. R ²	Tolerance	VIF
1. Model	.13*					.08		
2. M-C	.00	-.13	-.06	-.56	-.11	-.01	.89	1.13
3. Mindfulness Practice (yrs)		.02	.29*	2.39	.26		.79	1.27
4. FFMQ		.06	.06	.36	.05		.49	2.02
5. DSI		.05	.07	.47	.07		.56	1.79

Note: B = The unstandardized regression coefficient, sr² = the semi-partial correlation. 1. Model = Combined Meditation Experience (yrs), FFMQ, and DSI; 2. M-C = Marlow-Crowne Social Desirability Scale; 3. Mindfulness Practice (yrs) = Years Supervisees Practiced Mindfulness Meditation; 4. FFMQ = Five Facet Mindfulness Questionnaire; 5. DSI = Differentiation of Self Inventory.

* $p < .05$

Chapter V

Discussion

The purpose of this study was to examine the relationships among meditation experience, mindfulness, differentiation of self, and countertransference management to begin to build a model of how meditation experience, mindfulness, differentiation of self, when combined, predict countertransference management. This chapter will address the study's findings in the context of previous research, and in terms of implications for theory, practice, and training. Lastly, limitations of the current study and suggestions for future research will be discussed.

The results of this study are promising in terms of building a model to better understand components of countertransference management (see Figures 2 and 3). The ability to manage countertransference was predicted by the linear combination of meditation experience, mindfulness and differentiation of self. When combined, meditation experience, mindfulness, and differentiation of self, accounted for 7.9% of the variance of countertransference management, when social desirability was controlled.

The impact of social desirability on how well the three components, when combined, predicted countertransference management can be examined by noticing the change in actual significance values without controlling for social desirability in Figure 2 (*Multiple R* = .34, $p = .029$) and the value of these relationships when controlling for social desirability in Figure 3 (*Multiple R* = .36, $p = .040$). While the model became slightly stronger when controlling for therapists' self-reported social desirability, it also became non-significant at the $p < .01$ level. It is important to note that the author used $p < .01$ to determine significance in the model when controlling for social desirability to minimize the chance of committing a Type I error. Thus, the

results suggest that these factors when combined may be a strong model to predict the empirically supported qualities that facilitate the ability to manage countertransference.

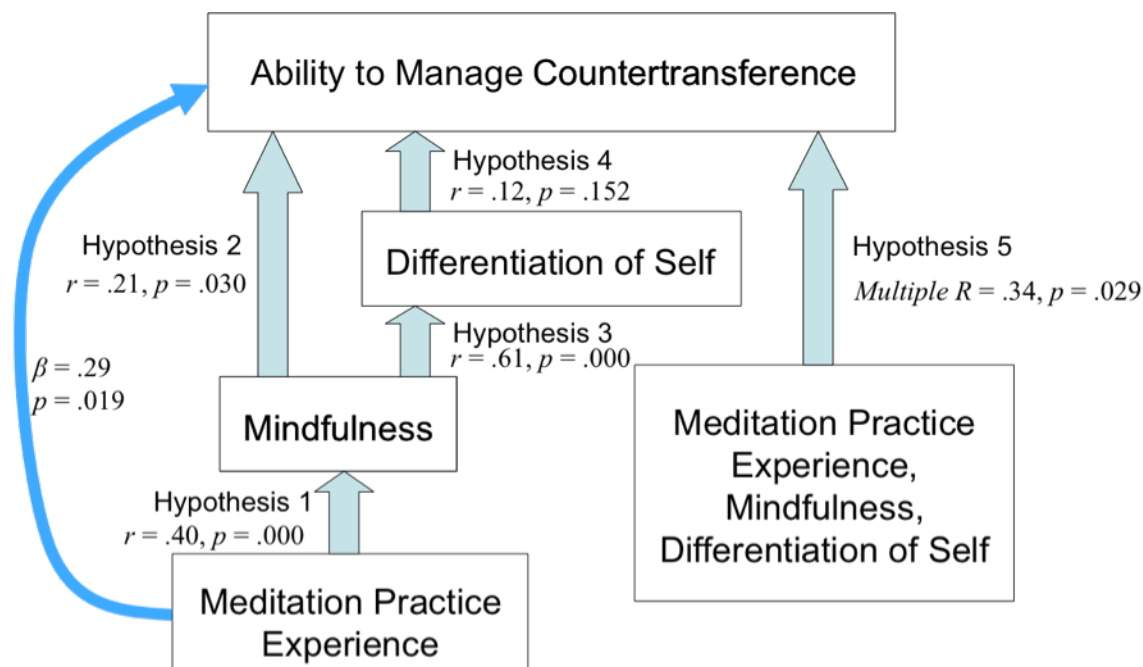


Figure 2. *Countertransference Management Model*

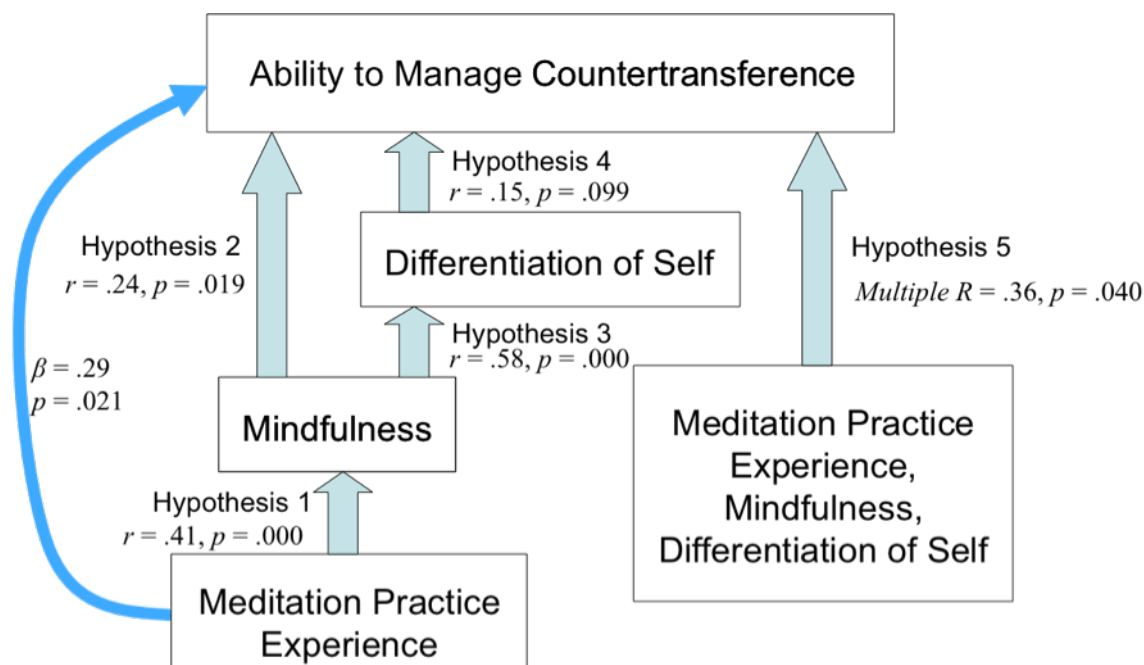


Figure 3. *Countertransference Management Model When Controlling for Social Desirability*

This is the first study to propose such a model to predict countertransference management. Given that therapists' individual differences can facilitate positive client outcome (Lambert & Barley, 2002), and that countertransference behavior has been found to be inversely related to treatment outcome (Hayes et al., 1997), this study contributes to the field's understanding of such individual differences by identifying a model that can contribute to therapists' ability to manage countertransference.

Among the three predictor variables of the model, only mindfulness meditation experience was a significant predictor of the ability to manage countertransference as shown by the curved arrow on Figures 2 and 3. In other words, therapists' mindfulness meditation experience predicted the degree to which they possessed the qualities that have been theorized and empirically supported to positively relate to countertransference management. While the relationship between meditation experience and countertransference management was not addressed in the hypotheses, this finding implies that therapists who practice mindfulness meditation may develop countertransference management qualities.

Recent research has shown that mindfulness meditation practice increases information processing speed (Moore & Malinowski, 2009), decreases task effort (Lutz et al., 2009), and contributes to having fewer distracting thoughts during the task at hand (Lutz et al., 2009). Lutz et al.'s research, in particular, suggests that due to greater attentional skills and greater ability to manage distractions, therapists who practice mindfulness meditation may have greater ability to be present to their clients. Future research could examine meditation experience as a predictor of countertransference management qualities. Should future studies support mindfulness meditation experience as a mechanism that contributes to countertransference management as this study suggests, mindfulness meditation training can be integrated into therapists' training, which may

subsequently lead to therapists' development of countertransference management qualities, and subsequently contribute to more successful treatment.

Implications for Theory, Practice, and Training

Mindfulness and Meditation Experience.

The study found that mindfulness itself was a function of meditation experience, in terms of whether or not counselors have practiced meditation, how many years they have practiced, how frequently per week they practiced, and how much time per week they practiced. The finding that therapists' ability to observe and notice sensations, thoughts, and feelings and therapists' non-reactivity were significantly higher among meditators than non-meditators suggests that mindfulness meditation practice may contribute to developing inner awareness and non-reactivity among therapists. The finding that therapists' ability to observe and notice sensations, thoughts, and feelings were significantly higher among meditators than non-meditators supports Baer et al., (2008)'s notion that the inclination to observe internal and external stimuli is a function of mindfulness meditation experience.

The results that meditation experience directly correlates with mindfulness confirm previous findings that mindfulness meditation practice cultivates mindfulness over time (Siegel, 2007b) and that meditators score higher on the FFMQ than non-meditators (Baer et al., 2008; Van Dam, Earleywine, Danoff-Burg, 2009). These results are consistent with findings that higher self-reported mindfulness scores were found among non-clinical novice meditators who participated in a 10-day intensive mindfulness meditation retreat compared to a waitlisted control group as measured by the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) (Chambers, Lo, & Allen, 2008). Similarly, these results are consistent with findings from an intervention study in which a community sample that experienced on-going anxiety, depression,

and/or chronic pain had higher self-reported mindfulness after 8-weeks of Mindfulness-Based Stress Reduction (MBSR) as measured by the MAAS (McKim, 2008). In addition, the results of this study are consistent with findings that novice meditators exposed to MBSR or the Eight Point Program (EPP) (Easwaran, 1978/1991) had higher self-reported mindfulness, as measured by the MAAS, compared with controls (Shapiro et al., 2008).

The finding that meditation experience directly correlates with mindfulness, even when controlling for social desirability, is consistent with previous mindfulness research using social desirability as a covariate. Previous research has found that social desirability response bias has not had a significant effect on scores of well-being among cancer patients exposed to MBSR (Kieviet-Stijnen, Visser, Garssen, & Hudig, 2008), and not had a significant effect on college students' self-reported ratings of mindfulness and well-being (Shapiro et al., 2008). Similarly, decreases in psychological distress were not impacted by social desirability response bias in non-clinical participants exposed to a 10-day mindfulness meditation course (Ostafin et al., 2006).

It is important to note that the findings confirming the first hypothesis are not consistent with Kholooci (2007)'s finding that meditation practice did not affect mindfulness scores. Kholooci found that meditating therapists had similar mindfulness scores as measured by the FFMQ as therapists who did not meditate. While the reasons for the discrepancy between the findings from the current study and Kholooci's findings regarding mindfulness meditation experience and mindfulness are unknown, perhaps the FFMQ's use among Kholooci's sample was subject to differential item functioning, which will be addressed in the limitations section of this chapter. As discussed in Chapter 2, Kholooci used total time in minutes per practice session, and total number of times per week of practice as a measure of meditation experience. Data on how long therapists practiced meditation were not collected. The current study used a

multifaceted approach to measuring meditation experience since this study collected length of practice experience, in addition to total time in minutes per practice session and total number of times per week of practice. Perhaps the current study's use of a multifaceted approach to measuring meditation experience made a difference in the findings of a direct relationship between meditation experience and mindfulness.

Mindfulness and Countertransference Management.

The study found that therapists' non-reactivity was the only quality of countertransference management that was a function of mindfulness. Other aspects of mindfulness did not predict qualities of countertransference management. This implies that the decreased reactivity component of mindfulness may be a pivotal mechanism in the ways mindfulness and countertransference management intersect. Thus, this finding suggests that the more non-reactive the therapist, the better able he/she can manage countertransference.

This is the first study to examine mindfulness and countertransference management. Previous research found countertransference awareness and mindfulness to be inversely related (Kholooci, 2007). However, due to the misuse of the instrument to measure countertransference awareness, Kholooci's (2007) findings are questionable, as discussed in chapter 2.

It is important to note that using the common practice of rounding the p value to 2 decimal places makes the relationship between overall mindfulness and countertransference management non-significant when controlling for social desirability. When initially examining their relationship, overall mindfulness was significantly directly correlated to countertransference management ($r = .21, p = .030$). However, since the author used $p < .01$ to determine significance when controlling for social desirability, this correlation was not statistically significant when controlling for social desirability ($r = .24, p = .019$) as demonstrated in Figures

2 and 3. Similarly, the relationship between non-reactivity, an aspect of mindfulness, and empathy, an aspect of countertransference management, changed from being significant ($r = .12$, $p = .03$) as shown in Figure 2 to non-significant when social desirability was controlled ($r = .24$, $p = .019$) as showed in Figure 3.

Future research is needed examining the ways in which non-reactivity and specifically, non-reactivity developed by mindfulness meditation, contribute to countertransference management. Given the potential role of social desirability in the relationship between mindfulness and countertransference management, it is relevant to include social desirability in future research. In addition, future research could include a measure on the role of social desirability in the supervisee-supervisor relationship in relation to mindfulness and countertransference management measures.

Differentiation of Self and Countertransference Management.

Therapists' countertransference management qualities were found not to be a function of therapists' overall self-differentiation. However, therapists' ability to assume an I-position was found to positively relate to their countertransference management qualities, even when controlling for social desirability. This implies that therapists who are more able to maintain a sense of themselves and maintain their ground even under pressure may have better countertransference management skills.

The finding that the relationship between the I-Position subscale of the DSI and the Self-Insight subscale of the CFI changed from being significant to being non-significantly correlated when controlling for social desirability suggests that social desirability response bias may have played a role in how supervisors rated their supervisees on self-insight.

This is the first study to examine countertransference management and differentiation of self. While the results from this study suggest that little relationship exists between differentiation of self and countertransference management, future research is needed using different methodology to better understand the relationship among these constructs.

Mindfulness and Differentiation of Self.

Therapists' mindfulness was found to have a strong direct relationship with therapists' self-reported differentiation of self, even when controlling for social desirability. This finding implies that the more mindful the therapist, the better the therapist may be in balancing autonomy and intimacy in relationships. This was the first study to empirically examine the relationship between mindfulness and differentiation of self. As proposed in Chapter 2, both mindfulness and differentiation of self have similar correlates including self-regulation, effortful control, relationship satisfaction, and decreased reactivity, decreased anxiety, and increased relationship satisfaction. This provides the first empirical support of these constructs and supports the theoretical relation between mindfulness and differentiation of self proposed in Chapter 2.

In examining how aspects of mindfulness relate to aspects of self-differentiation, several inferences can be made. For one, the findings suggest that the more that therapists can describe and label their experience with words, the more they are likely to have differentiated relationships. In addition, the findings suggest that therapists who act with awareness, concentration and less distraction may be more differentiated in their relationships. The findings also suggest that therapists who are more non-judging of experience may be more differentiated in their relationships as a whole. Thus, the more non-judgmental therapists are, the more likely they are differentiated in their current significant relationships.

Given the benefits of both mindfulness and differentiation of self in terms of potentially translating to better interpersonal and relational skills in the therapeutic relationship, the strong relationship between mindfulness and differentiation of self has implications for potentially including mindfulness meditation in training programs for psychotherapy trainees. While the current study cannot demonstrate causation, the strong direct relationship between mindfulness and differentiation of self implies that there may be a relationship with how mindfulness influences how therapists function in interpersonal relationships, including the therapeutic relationship. Since meditation practice significantly contributed to mindfulness even when controlling for social desirability, mindfulness meditation practice may be one direct way that therapist trainees and practicing therapists can access the benefits of mindfulness reviewed in Chapter 2 and supported by recent research.

In their recent practice review based on mindfulness research, Davis and Hayes (in press) propose that the empirically supported benefits of mindfulness include emotion regulation, decreased reactivity, increased response flexibility, and improved relationships. Recent research also suggests that mindfulness helps develop compassion (Kingsbury, 2009). Kingsbury found that the non-judging and non-reacting components of mindfulness were strongly correlated with self-compassion and two facets of empathy, taking on others' perspectives and reacting to others' emotions with discomfort. In addition, Kingsbury found that the relationship between perspective taking and mindfulness was fully mediated by self-compassion. Following mindfulness-based interventions, counselor trainees have reported increased self-awareness and insights about their professional identity (Birnbaum, 2008), increased emotional intelligence and social connectedness and reduced stress and anxiety (Cohen & Miller, 2009). Greason and Cashwell (2009) found that counseling self-efficacy was significantly predicted by self-reported

mindfulness among masters-level interns and doctoral counseling students. Specifically, the relationship between mindfulness and self-efficacy was mediated by attention, which implies that mindfulness may facilitate the cultivation of beneficial attentional processes that help psychotherapist trainees (Greason & Cashwell, 2009). While future research on meditation experience and mindfulness needs to further examine treatment outcomes among therapists who meditate beyond the research reviewed in Chapter 2, trainees could benefit from the many above-mentioned processes and outcomes of mindfulness practice and mindfulness, which may have interpersonal benefits for the therapeutic relationship alone based on the current study's findings.

Even when controlling for social desirability, non-reactivity had a significant direct relationship with overall countertransference management and 3 of 5 of the qualities of countertransference management (Anxiety Management, Self-Insight, and Self-Integration) and also significantly correlated to overall self differentiation, and all but one (Emotional Cut-Off) component of the differentiation of self subscales. This suggests that perhaps the non-reactivity component of mindfulness may be the best predictor of both differentiation of self and countertransference management. In other words, therapists who are less reactive to their inner experience may be more differentiated in their relationships and have more of the qualities that facilitate countertransference management.

This finding relates to recent evidence that supports that mindfulness meditation facilitates people becoming less reactive (Cahn & Polich, 2009; Goldin & Gross, 2010; Ortner, Kiner, and Zelazo, 2007; Siegel, 2007a, 2007b) and people developing greater cognitive flexibility (Moore & Malinowski, 2009; Siegel, 2007a, 2007b). In addition, in their assessment of very experienced mindfulness meditators, Cahn and Polich (2009) found that meditators

showed minimal emotional and cognitive reactivity to distracting stimuli while in a meditative state. Thus, the finding from the current study of the strong direct relationship with the non-reactivity aspect of mindfulness and components of the differentiation of self and countertransference management provide further support of potential outcomes of decreased reactivity within the construct of mindfulness. Future research needs to directly measure the causal impact of mindfulness meditation practice on emotional and cognitive reactivity and the Non-React subscale of the FFMQ to better understand how mindfulness meditation practice may contribute to countertransference management and differentiation of self.

This finding also suggests that mindfulness, differentiation of self, and countertransference management may share emotion regulation as a common ground. Previous research provides evidence that mindfulness helps cultivate effective regulation of emotion in the brain (Corcoran, Farb, Anderson, & Segal, 2010; Farb et al., 2010; Siegel, 2007b) and provides evidence to suggest that emotion regulation is an empirically-supported benefit of mindfulness (Davis & Hayes, in press). The current study suggests that the component of decreased reactivity may help guide future theory and research on how mindfulness affects countertransference management and affects interpersonal relationships, including the therapeutic relationship.

Practice and Supervision.

Davis (2010) proposes that mindfulness meditation could benefit clinical supervision by cultivating greater supervisor presence to their supervisees and fostering less reactivity to their supervisees' anxiety. If in fact the more mindful the therapist, the greater ability to balance autonomy and intimacy in relationships as the current study's findings support, it would make sense that this would be evident not only in the therapeutic relationship but the supervisory relationship as well. In other words, perhaps therapists who are more mindful also have more

differentiated relationships including more differentiated therapeutic relationships and supervisory relationships. Since correlates of differentiation of self include relationship satisfaction, identity development, decreased stress and anxiety, increased regulatory skills as previously discussed in Chapter 2, this could have implications for treatment outcome and working alliance between therapists and clients and between therapists and their clinical supervisors.

Training implications.

It has been suggested that mindfulness be included in psychotherapy training for its benefits as a meta-cognitive skill (Fauth, Gates, Vinca, Boles, & Hayes, 2007). Given that mindfulness meditation is a means to develop mindfulness and may be easily measured in assessing its effects, trainees and practicing therapists could be exposed to training in mindfulness meditation via their training programs and continuing education programs. Bruce, Manber, Shapiro, and Constantino (2010) propose that mindfulness meditation can help therapist trainees learn how to self-attune, which enhances their ability to develop and maintain effective therapeutic relationships and repair relationship ruptures. Given the movement in professional psychology towards using training benchmarks and the acquisition of competencies to measure outcome-based education, training and credentialing (Kaslow et al., 2002), mindfulness as an outcome of mindfulness meditation practice could potentially be included in training programs as a necessary specific competency.

Outcomes of mindfulness meditation are found in at least five of Fouad et al. (2009)'s proposed model of competency benchmarks across training levels. Specifically, the behavioral anchors proposed by Fouad et al. of showing compassion, empathy, demonstrating "reflection-in-action" (p. S10), self-care skills, interpersonal relationship skills and affective skills (e.g.

affect tolerance and tolerating ambiguity) correspond to empirically supported benefits of mindfulness meditation. Thus, including mindfulness meditation as an intervention in training programs may help trainees cultivate some of the necessary competencies outlined by Fouad et al.

In support of meditation becoming integrated into higher education, Shapiro, Brown, and Astin (2008) have proposed that meditation can help facilitate students achieving traditional educational goals by cultivating attention, information processing skills, interpersonal adaptivity, stress resiliency, creativity, and overall psychological well-being. Given the research that supports meditations effect on information processing, attention, and emotional regulation, perhaps it could be theorized that incorporating mindfulness meditation training into therapists' training programs could potentially enhance student learning outcomes. While applying mindfulness and contemplative interventions to collegiate educational settings have been explored (Holland, 2004; 2006; Shapiro et al., 2008), Braud (2006) offers the only model of a contemplative approach to graduate psychology programs. Should the benefits of mindfulness be considered to be valuable enough to therapists in training, more research is needed on ways to integrate mindfulness interventions and/or contemplative education into programs training therapists. More research evidence of the benefits of mindfulness training in graduate psychotherapy training programs is needed to influence changes in policy and in psychotherapy training program requirements.

Study Limitations

This study has several limitations as a correlational design. While this study's results are promising, by virtue of any correlational design, the findings cannot demonstrate causation. Since participants volunteered to participate in on-line self-report measures, another limitation of the study is that of potential selection bias. For example, supervisees who did not want to be rated by their supervisor may not have participated. Conversely, supervisees who had a positive supervision experience or were expecting favorable ratings from their supervisors may have been more likely to participate. Similarly, supervisors who chose not to participate may not have wanted to rate their supervisees. While this is all speculation, it does raise the question of external validity. Perhaps paying each participant \$5.00 for their participation influenced the participation rate of 85% for supervisees and 81% for supervisors.

One known factor that may differentiate some of the supervisee sample from their peers is their practice of mindfulness meditation. As discussed in Chapter 3, part of recruitment efforts involved intentionally inviting training programs that included mindfulness meditation and/or contemplative education in their training to participate in the study. This was to ensure that some of the supervisee sample was exposed to mindfulness meditation, which was necessary in order to test the hypotheses. While not all of the supervisee sample came from contemplative training programs and even though traditional training programs were also included in the study, the supervisee sample may not reflect the general helping profession population. Thus, the generalizability of the results may have limitations.

Future research could explore what other factors contribute to people's likelihood of practicing meditation or choosing a training program that integrates mindfulness practices. This would enhance our understanding of how different the supervisee sample may be from the

general helping profession population. It may be that people who are likely to practice mindfulness meditation and/or choose a training program that integrates mindfulness may have other factors about them as a population that may influence their degree of differentiation of self and countertransference management. While there is no research to investigate such factors, it is relevant to consider.

A strength of the study was that it had an educationally diverse sample of supervisees within the helping profession including supervisees in training and post-graduation. This included supervisees across masters in counseling, counselor education, higher education, school counseling, rehabilitation counseling, transpersonal counseling, integral counseling, contemplative psychotherapy, social work, art therapy, wilderness therapy and marriage and family therapy programs and supervisees from Ph.D. and Psy.D. clinical and counseling training backgrounds. In addition, there was also a wide range of settings in which supervisees conducted psychotherapy including university counseling centers, outpatient clinics/community mental health centers, private practice, in-patient psychiatric hospitals, schools, office of vocational rehabilitation, Office of Disability support services, university career centers, an outpatient chemical dependency program, a forensic setting, residential treatment center, after school programs, and community-based programs. According to the American Psychological Association (2010), these settings are reflective of settings in which psychotherapy is conducted by the helping profession. In addition, the supervisee sample represented a variety of training contexts (e.g., practicum, internship, and post doc). Thus, despite any differences due to whether or not supervisees practiced mindfulness meditation, the supervisee sample seems to represent the realistic diversity of training backgrounds and practice settings found in the general helping profession. In addition, a strength of the study was its use of real counselors and their

supervisors. Manipulating any of the variables in the study would have restricted the study's ecological validity.

Another limitation of the study pertains to those inherent in the use of self-report measures. While supervisees' countertransference management was reported by their supervisors, supervisees' meditation experience, mindfulness, and differentiation of self were reported by the supervisees themselves. Thus, these measures are subject to the common biases of any self-report measures including social desirability, the Hawthorne effect, cognitive dissonance, and overestimating due to overconfidence (Heppner, Wampold, & Kivlighan, 2008). Due to the technological constraints of collecting data on-line, the order of the FFMQ, the DSI, and SD was presented in the same order for each participant, which did not counterbalance any effect from the order in which instruments appear electronically.

Lastly, given the criticisms of mindfulness self-report measures as previously discussed in Chapter 2, it is relevant to consider recent research pertaining to the limitations of the FFMQ in measuring mindfulness across non-meditating and meditating samples. Van Dam et al. (2009) recently found that while meditators' mindfulness increased with meditation practice, and meditators still reported higher levels of overall mindfulness compared to non-meditators, there were differences across groups in how meditators and non-meditators responded to items of the FFMQ. For items in which there was a distinctively different response pattern between meditators and non-meditators, meditators self-reported lower mindfulness on negatively worded items than non-meditators who had similar total FFMQ scores (e.g., I am easily distracted). Meditators self-reported higher mindfulness compared to non-meditators who had similar mindfulness total scores on items that were directly worded (e.g., "I pay attention to sensations, such as the wind in my hair or sun on my face"). In other words, meditators reported both direct

and negative items with equal frequency. However, non-meditators self-reported lower scores to negatively worded items (that would identify mindlessness) than directly worded items (that would identify mindfulness). Based on this evidence, Van Dam et al. proposes that the FFMQ may not function in the same way for meditators and non-meditators, calling into question the suitability of using the FFMQ in studies comparing these two sample populations and in meditation intervention studies in which the FFMQ is a pre-post measure. In addition, Van Dam et al.'s findings further raise questions about the utility of using self-reported mindfulness measures to compare meditators and non-meditators. In examining the scatter plot of the relationship between meditation experience in years and mindfulness (see Figure 4), it is noticeable that the ratings of self-reported mindfulness among participants with no meditation experience range from no mindfulness to highly mindful. In considering that the FFMQ was used in three of the five hypotheses of this study, it is relevant to consider the limitations of using the FFMQ among both meditating and non-meditating therapists in this study in light of Van Dam et al.'s findings.

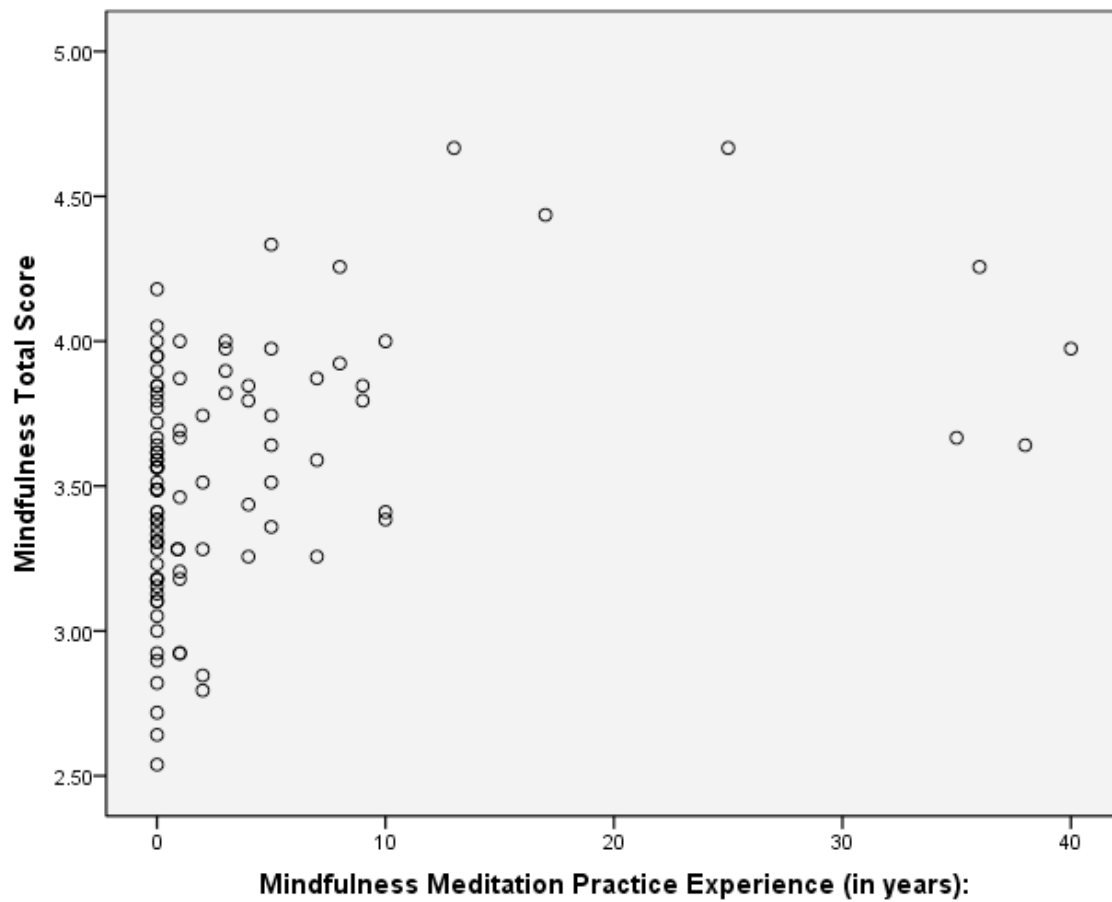


Figure 4. *Scatter Plot for Hypothesis 1*

Future Research

This study was the first to examine how the construct of mindfulness relates to differentiation of self, how mindfulness relates to countertransference management, and how differentiation of self relates to countertransference management. In addition, this was the first study to consider combining meditation experience, mindfulness, and differentiation of self in relation to countertransference management. As such, this study provides important groundbreaking empirical steps that can help guide future research examining these constructs.

Mindfulness and Meditation Experience.

Given the potential problems with using the FFMQ among meditators and non-meditators, future research could include examining meditation experience as a predictor of differentiation of self and countertransference management. An experimental design involving meditators and non-meditators may be the best methodological approach to capture the effects of meditation practice on these two constructs and demonstrate causality. Such research could have transformational implications for including mindfulness meditation in training programs.

In addition, given the criticisms regarding the difficulty quantifying mindfulness (i.e. Grossman, 2008), it would have been beneficial in the current study to have the supervisors rate the supervisee's mindfulness. While there are currently no measures of mindfulness designed to rate another's mindfulness, there is a need for means to assess one's mindfulness from multiple sources. Similar to Fehrer (2002)'s use of participants' partners or friends to qualitatively measure the effects of an awareness intervention, future research could include a mixed methods approach involving a mindfulness mediation intervention using friends and partners assessment of therapists' mindfulness and differentiation of self in addition to relevant quantitative measures.

Furthermore, to better capture data on mindfulness meditation practice, there is a need to assess how mindful states are being integrated into daily life. This could be included in future studies perhaps through diaries from the participants themselves (e.g. Shapiro, et al., 2008) to measure adherence to mindfulness interventions, or from measures from participants' partners, family members, and friends, such as used in Fehrer (2002). Even though adherence to mindfulness practices has been shown to mediate the stress benefits of mindfulness (Oman et al., 2006), Caspi and Burleson (2005) propose that compliance to practicing meditation in studies and adherence to practicing meditation in general may not translate to quality meditation practice. Reavley and Pallant (2009) recently developed an instrument to measure both experiences during meditation and effects of meditation in everyday life. Given the importance of using mindfulness meditation practice experience as a predictor variable by itself, rather than solely using self-report measures of mindfulness, future studies on mindfulness among therapists could include such measures to assess quality of practitioners' meditation practice and a measure on adherence to meditation practices.

Garland and Gaylord (2009) have proposed that future mindfulness research could include performance-based measures of mindfulness and neuroimaging technology to validate self-report data. Examples of neuroimaging technology include: functional magnetic resonance imaging (fMRI), a specialized MRI brain scan that measures the change in blood flow during brain activity; and electroencephalogram (EEG), which measures electrical activity on the scalp. These methodologies could be used to compare meditating and non-meditating therapists in order to more accurately capture mindfulness and its direct relationships to differentiation of self and countertransference management.

Future research is needed to identify other means of increasing mindfulness, in addition to mindfulness meditation. Given that Shapiro et al. (2008) found that two different structured meditation programs enhanced mindfulness, multiple avenues to cultivate mindfulness among trainees and psychotherapists need to be further researched. Since non-reactivity was found to have a significant direct relationship with both countertransference management and differentiation of self, even when controlling for social desirability, future research can investigate means of cultivating non-reactivity in therapist trainees and therapists in practice. In addition, longitudinal studies of therapists who learn and subsequently regularly practice mindfulness meditation can help our understanding of the ways in which the benefits of meditation practice develop over time, including the impact of meditation practice on relationships and psychotherapy skills such as differentiation of self and countertransference management.

Given that subscales relationships between measures became non-significant (e.g. FFMQ total scores and CFI total scores) when controlling for social desirability, it is crucial to include social desirability when using self-report measures in future research on mindfulness. Grossman (2008) proposes that familiarity and social desirability including other biases may affect mindfulness self report measures. Van Dam et al. (2009)'s found that students who were familiar with mindfulness had a $\frac{1}{4}$ standard deviation higher total mindfulness scores even though they were among a sample of students who had no meditation experience. Future studies could include a measure rating how familiar participants are with the notion of mindfulness.

Differentiation of Self.

The fact that differentiation of self was found to have a strong relationship with mindfulness, but not with countertransference management raises the question of how differentiation of self affects therapists. This is the first known study to examine differentiation of self among therapists. Future research on differentiation of self could explore the relationship between differentiation of self among therapists and other constructs relevant in psychotherapy such as self-efficacy, working alliance, and treatment outcome.

Countertransference Management.

This study's findings holds promise for future research on means to manage countertransference. Gelso and Hayes (2007) point to the gap in research on including countertransference management in psychotherapy training. It has been proposed that helping skills practicum-type classes are potentially the most valuable in graduate training in cultivating competence in helping skill development (Hill, Stahl, & Roffman, 2007; Ladany, 2007). Given the non-significant relationship between differentiation of self and countertransference management and given that the relationship between mindfulness and countertransference management became non-significant when controlling for social desirability at the $p < .01$ level, future research on the relationship between training and clinical supervision on countertransference management and other relevant psychotherapy constructs related to successful treatment is needed.

In addition, it is relevant to include a measure of social desirability when investigating countertransference management. There are no known studies addressing countertransference management and social desirability. Social desirability was not assessed in the development of the CFI (Hayes et al., 1991; Van Wagoner et al., 1991). The findings that the correlation between

mindfulness and countertransference management became non-significant when controlling for social desirability suggests that response bias played a role in measuring mindfulness and/or countertransference management in the current study. Future research needs to examine the direct relationship between these two constructs, perhaps using other means to assess for mindfulness such as previously discussed.

To potentially account for social desirability bias, it is relevant to consider other ways of measuring countertransference in addition to using the CFI-R. It is important to emphasize that the CFI was designed not to measure countertransference management directly, but to measure the degree to which therapists possess those five qualities that have been theorized and empirically supported to positively relate to countertransference management (Hayes, Gelso, Van Wagoner, & Diemer, 1991; Van Wagoner, Gelso, Hayes, & Diemer, 1991). Future research could include utilizing instruments measuring somatic and affective manifestations of countertransference in addition to measuring countertransference management using the CFI-R.

Somatic Manifestations of Countertransference.

Somatic countertransference has been a largely neglected area of countertransference research (Vulcan, 2009). Somatic countertransference refers to “the therapists’ awareness of their own body, of sensations, images, impulses, feelings and fantasies that offer a link to the client’s process and the intersubjective field” (Orbach & Carroll, 2006, p. 64). Orbach and Carroll (2006)’s definition of somatic countertransference focuses on therapists’ awareness and perhaps may better relate to or encompass a totalistic definition of countertransference in which all therapists’ responses to the client are viewed as countertransference.

In future research that could investigate somatic countertransference in relation to mindfulness meditation experience, mindfulness, differentiation of self, and countertransference

management skills, it would be necessary to have a moderate definition of somatic countertransference similar to the moderate definition of countertransference, such as defined by Rosenberger and Hayes (2002b, p. 265) as “counselor reactions that originate from areas of unresolved conflict in the counselor.” The ability to distinguish between somatic responses pertaining to the therapists’ unresolved issues per the moderate definition of countertransference used in this study and those elicited by the dynamics from the client or related to the intersubjective field between client and therapist would be a necessary therapeutic skill that potentially could be measured. While theory on somatic countertransference is abundant (see Vulcan, 2009 for review), there is no research on such phenomena nor measures of somatic countertransference. Gelso and Hayes (2007) include visceral sensations in their description of internal countertransference and imply that countertransference-based visceral sensations, feelings, and thoughts may at times be helpful to the therapist in their clinical work.

Given that research suggests that mindfulness meditation may neurologically cultivate people’s ability to emotionally attune to others and help develop their sensitivity to their own body sensations (Siegel 2007b), it would make sense that people who practice mindfulness meditation may develop ways to better track their own degree of being embodied or grounded so that they may track their own felt sense of clients through the use of their body. While much of theory on somatic countertransference stems from the field of dance/movement therapy and somatic psychology, integrating somatic countertransference research into measuring countertransference management skills as a whole could help identify aspects of countertransference management that may be enhanced by the practice of mindfulness meditation. Future research is needed to better understand the relationship between mindfulness

meditation experience, mindfulness and the ways in which countertransference manifests, including somatic countertransference.

Affective Manifestations of Countertransference.

In addition, it is relevant to further examine the relationship between affective manifestations of countertransference and the constructs of mindfulness and differentiation of self. Given that Anxiety Management subscale of the CFI had a significant direct relationship with the Non-React subscale of the FFMQ and the I Position subscale of the DSI, anxiety may be a correlate that captures the intersection of mindfulness, differentiation of self and countertransference management. These findings specifically suggest that perhaps the more therapists are able to manage their anxiety, the more non-reactive they are and better able they are to maintain a clear sense of self, even under pressure.

Given that emotion regulation theoretically links mindfulness and differentiation of self as discussed in Chapter 2, future research could include measuring general emotion regulation skills and countertransference management. For example, do countertransference management skills correlate with emotion regulation skills in general, or just specific to managing anxiety? Fauth (2006) proposes that there is lack of empirical investigation into affective experiences (other than anxiety) related to countertransference. The Therapist Appraisal Questionnaire (TAQ; Fauth, Hayes, Park, & Friedman, 1999) is the only known measure to date with strong psychometric properties that assesses therapists' initial affective appraisals related to threat, challenge, and harm/loss (Fauth et al., 1999; Fauth, 2006). Measuring other emotional responses indicative of countertransference could also help enhance our understanding of the role of emotion regulation in countertransference management in general, which subsequently could

enhance our understanding of how countertransference management relates to empirically supported relationships.

Previous research on the emotional, cognitive, and behavioral manifestations of countertransference suggest that countertransference is multi-dimensional (Gelso & Hayes, 2007; Hayes et al., 1998). Thus, future research on countertransference needs to measure countertransference in such a way to capture its inherent complexity and the multiple means it can be internally and externally expressed to better understand countertransference management and its relationship with constructs that have shown promising benefits to therapists, such as mindfulness and mindfulness meditation experience.

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Appendix A

5-FACTOR M QUESTIONNAIRE

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	Rarely True	sometimes true	often true	very often or always true

- _____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- _____ 2. I'm good at finding words to describe my feelings.
- _____ 3. I criticize myself for having irrational or inappropriate emotions.
- _____ 4. I perceive my feelings and emotions without having to react to them.
- _____ 5. When I do things, my mind wanders off and I'm easily distracted.
- _____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- _____ 7. I can easily put my beliefs, opinions, and expectations into words.
- _____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- _____ 9. I watch my feelings without getting lost in them.
- _____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- _____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- _____ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things.
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _____ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- _____ 21. In difficult situations, I can pause without immediately reacting.
- _____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- _____ 23. It seems I am “running on automatic” without much awareness of what I’m doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn’t be thinking the way I’m thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I’m feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I’m doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

Appendix B

DSI-R

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

		NOT AT ALL TRUE OF ME					VERY TRUE OF ME
1.	People have remarked that I'm overly emotional.	1	2	3	4	5	6
2.	I have difficulty expressing my feelings to people I care for.	1	2	3	4	5	6
3.	I often feel inhibited around my family.	1	2	3	4	5	6
4.	I tend to remain pretty calm even under stress.	1	2	3	4	5	6
5.	I usually need a lot of encouragement from others when starting a big job or task.	1	2	3	4	5	6
6.	When someone close to me disappoints me, I withdraw from him/her for a time.	1	2	3	4	5	6
7.	No matter what happens in my life, I know that I'll never lose my sense of who I am.	1	2	3	4	5	6
8.	I tend to distance myself when people get too close to me.	1	2	3	4	5	6
9.	I want to live up to my parents' expectations of me.	1	2	3	4	5	6
10.	I wish that I weren't so emotional.	1	2	3	4	5	6
11.	I usually do not change my behavior simply to please another person.	1	2	3	4	5	6
12.	My spouse/partner could not tolerate it if I were to express to him/her my true feelings about some things.	1	2	3	4	5	6
13.	When my spouse/partner criticizes me, it bothers me for days.	1	2	3	4	5	6

		NOT AT ALL TRUE OF ME					VERY TRUE OF ME
14.	At times my feelings get the best of me and I have trouble thinking clearly.	1	2	3	4	5	6
15.	When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.	1	2	3	4	5	6
16.	I'm often uncomfortable when people get too close to me.	1	2	3	4	5	6
17.	I feel a need for approval from virtually everyone in my life.	1	2	3	4	5	6
18.	At times I feel as if I'm riding an emotional roller-coaster.	1	2	3	4	5	6
19.	There's no point in getting upset about things I cannot change.	1	2	3	4	5	6
20.	I'm concerned about losing my independence in intimate relationships.	1	2	3	4	5	6
21.	I'm overly sensitive to criticism.	1	2	3	4	5	6
22.	I try to live up to my parents' expectations.	1	2	3	4	5	6
23.	I'm fairly self-accepting.	1	2	3	4	5	6
24.	I often feel that my spouse/partner wants too much from me.	1	2	3	4	5	6
25.	I often agree with others just to appease them.	1	2	3	4	5	6
26.	If I have had an argument with my spouse/partner, I tend to think about it all day.	1	2	3	4	5	6
27.	I am able to say "no" to others even when I feel pressured by them.	1	2	3	4	5	6
28.	When one of my relationships becomes very intense, I feel the urge to run away from it.	1	2	3	4	5	6
29.	Arguments with my parent(s) or sibling(s) can still make me feel awful.	1	2	3	4	5	6
30.	If someone is upset with me, I can't seem to let it go easily.	1	2	3	4	5	6

		NOT AT ALL TRUE OF ME					VERY TRUE OF ME
31.	I'm less concerned that others approve of me than I am in doing what I think is right.	1	2	3	4	5	6
32.	I would never consider turning to any of my family members for emotional support.	1	2	3	4	5	6
33.	I often feel unsure when others are not around to help me make a decision.	1	2	3	4	5	6
34.	I'm very sensitive to being hurt by others.	1	2	3	4	5	6
35.	My self-esteem really depends on how others think of me.	1	2	3	4	5	6
36.	When I'm with my spouse/partner, I often feel smothered.	1	2	3	4	5	6
37.	When making decisions, I seldom worry about what others will think.	1	2	3	4	5	6
38.	I often wonder about the kind of impression I create.	1	2	3	4	5	6
39.	When things go wrong, talking about them usually makes it worse.	1	2	3	4	5	6
40.	I feel things more intensely than others do.	1	2	3	4	5	6
41.	I usually do what I believe is right regardless of what others say.	1	2	3	4	5	6
42.	Our relationship might be better if my spouse/partner would give me the space I need.	1	2	3	4	5	6
43.	I tend to feel pretty stable under stress	1	2	3	4	5	6
44.	Sometimes I feel sick after arguing with my spouse/partner.	1	2	3	4	5	6

Appendix C

CFI -R Supervisor Form

Below are characteristics that your supervisee may possess to varying degrees. Please indicate the degree to which you agree that each statement is descriptive of your supervisee using the following scale:

1	2	3	4	5
Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

My supervisee:

- ___ 1. is able to see things from the client's point of view.
- ___ 2. is aware of feelings in her/him elicited by client.
- ___ 3. is able to conceptualize her/his role in what transpires in the counseling relationship.
- ___ 4. possesses a stable sense of identity.
- ___ 5. is able to comprehend how her/his feelings motivate her/him while counseling.
- ___ 6. is comfortable in the presence of strong feelings from others.
- ___ 7. is able to distinguish between the client's needs and her/his own needs.
- ___ 8. is aware of her/his personal areas of unresolved conflict.
- ___ 9. is perceptive in her/his understanding of clients.
- ___ 10. is able to restrain herself/himself from excessively identifying with clients' conflicts.
- ___ 11. is aware of her/his personal impact on others.
- ___ 12. is willing to consider herself/himself as an impediment to client progress.
- ___ 13. is comfortable being close to others.
- ___ 14. is able to sort out how her/his feelings relate to clients' feelings.
- ___ 15. resolves her/his emotional conflicts.
- ___ 16. is able to recognize the boundaries between herself/himself and others.

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PUBLICATIONS

- Davis, D. M. & Hayes, J. A. (in press). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy Theory, Research, Practice, Training*.
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